

Voluntary Programs in Sustainable Finance

The Case of the Equator Principles

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Abstract

Voluntary environmental programs are a growing approach to facilitate sustainable development. These activities, too, are found in the financial sector, which involves numerous indirect environmental impacts.

This paper examines how the Equator Principles, one of the financial sector's voluntary environmental programs in the project finance loan business, is incorporated into lending activity. Accordingly, the analysis focuses upon three signatory financial institutions that employ the Equator Principles, two multilateral development banks' with environmental frameworks, and six other voluntary environmental programs.

The analysis finds that the tenets of the Equator Principles are part of the incremental progress in sustainable development in the competitive financial market and a valuable initiative, particularly in countries where laws and due process for sustainable development have not been well established. With the realization that the banking system is part of the fundamental social infrastructure, the analysis value in 1) establishing evaluation and monitoring processes through the Equator Principles Association, 2) creating more positive relationships with external stakeholders, and 3) including a financial technical support system as part of the process for carrying out borrower's responsibilities.

Keywords: sustainable development, financial service, Equator Principles, voluntary environmental program, project finance.

Executive Summary

Rio+20, as a sequent of the United Nations (UN) sustainable development conferences, reviewed the progress of sustainable development (SD) and reaffirmed political commitment to further environmentally considered development steps for a better future for all generations. Large numbers of voluntary commitments were announced including declarations by financial institutions as side events at the Rio +20 conference. In spite of the last four decades of UN efforts and a participation of the financial industry in the last two decades, advancing global SD remains a great challenge today.

In order to confront the problem and alter the society structure to a sustainable one, this paper focuses on money flow in economic activity, which is one of prominent SD components; the other two aspects are society and environment. While financial institutions produce limited amounts of direct environmental impacts compared to other sectors, their lending and investment businesses have ties to other inextricable commercial activities that produce and emit products detrimental to a sustainable society. There is a high intensity of environmental loss as a consequence of the nature of large-scale project particularly in emerging markets. It can continue as a negative spiral to result in environmental risks of the businesses. In other words, the environment related risks turn into inimical risks for the financial institutions. Adding to the problem, optimized mitigation plans for SD are still underdeveloped in the sector. As an alternative to being stranded at the circumstance, some banks have joined an environmental initiative in project finance business area where banks frequently expose to numerous amounts of risks so that they can be assented as both sustainable and responsible. The Equator Principles (EPs) are a common voluntary credit risk management framework for assessing environmental and social impacts and diminishing environmental and social risks. EPs create a level playing field in the competitive project finance business as one of various voluntary environmental programs (VEPs). The framework has four elements: 1) an environmental risk categorization principle, 2) a social and environmental assessment principle, 3) a principle of law and legislation compliance, and 4) a principle of environmental management planning. Nevertheless, EPs lack of a certifier and a monitoring process as a self-regulatory program.

The aims of this paper are to investigate 1) the impacts and development of SD and VEP mechanisms in the financial sector and 2) the utilization of EPs. Therefore, the following research questions are raised and discussed:

1. How are the EPs being viewed with regard to achieving sustainable development?
2. How have the expectations of the EPs been fulfilled; is there any difference between developing and developed countries?
3. How should the EPs be modified further to assist sustainable development or sustainable banking?

Qualitative research, including literature reviews, personal interviews, focus area research, and research analysis, is utilized to investigate the addressed research questions in three different phases: theoretical reviews, case studies, and analysis & discussion. Club theory and institutional isomorphism theory aid the conceptualization of the topic by identifying norms of project finance and SD, the position of the EPs among VEPs and motivation to join the EPs.

The analysis support the position that collaborative action actions of EPFIs and their borrowers are necessary to utilize the EPs framework in addition to EPFIs' work. The

enrollment in the EPs as a whole has no steady growth, but the EPs are becoming a more diverse association. In this section, two theories are discussed.

According to Club Theory, essential characteristics of voluntary clubs are sponsorship, eligibility, program requirements, incentives, and sanctions. First, EPs are an industry-sponsored program. Second, eligibility to join EPs is any financial institution running project finance business. Third, to join EPs, any prospecting financial institution must sign an adoption agreement. For retaining its membership, participants submit an annual report and pay an annual membership fee. Fourth, main incentives to join EPs are to receive exclusive club goods. Finally, EPs impose minor sanctions for non-compliance members: de-listing from EPs participant list if one fails to breach the program requirements.

Swords and program standards are important elements of voluntary clubs. Swords are monitoring and enforcement mechanisms comply with clubs' code of behavior. Analysis has found that EPs have a weak-sword and stringent-lenient club standards. Based on these analyses, the theory evaluates program designs and the effectiveness of the EPs and two other VEPs in the financial sector as voluntary clubs through four attributes: social externalities, shirking, branding benefit, and costs.

Assessment of voluntary environmental programs

	Social externalities	Shirking	Branding benefit	Costs
Equator Principles (Weak Sword & Stringent-lenient Standards)	Moderate to low	High	Low	Moderate to high
UN Environment Programme Finance Initiative (No sword & Stringent Standards)	High	High	High	Moderate to high
Investor Network on Climate Risk (No Sword & Lenient Standards)	Low	High	Medium	Low to moderate

Institutional Isomorphism Theory frames the motivations for financial institutions to join the EPs, by arguing that the assimilation does not happen by chance. Instead, it is a result of the organization having arisen through social institutionalization: coercive isomorphism, normative isomorphism, and mimetic isomorphism, hence typifying the whole process. The coercive isomorphism with both formal and informal pressure can explain a reason for large and famed multinational financial institutions to join EPs. The increased numbers of the EPFIs over several years can be explained by the mimetic isomorphism.

A discussion of the results of the analysis yielded the following:

First, although EPs cover a great number of project finance deals in emerging markets, it only counts for insubstantial amount of overall EPFI's lending activities.

Second, banks with stricter environmental policies might perceive negative harmonization in joining the EPs. In the meantime, in order to mitigate reputational risk inexpensively, some banks may join the EPs because of the ready-made framework: the mimetic isomorphism reason.

Third, willingness of project finance loan takers is an important aspect. They may seek loans from either a non-EPFI or a bank with an unsound environmental policy if they are reluctant to conduct borrower duties.

Fourth, EPs should be incorporated as internal risk management frameworks in EPFIs decision-making processes instead of as a part of corporate social responsibility programs.

Fifth, the current form of the EPs Association has limitations. Reviewing and revamping it may bring more fruitful results and greater effectiveness to the association.

Finally, with regard to overestimated categorization problem, insufficient procedures might cause environmental risks.

The results show that:

- 1) EPs are not an initiative related to corporate social responsibility, but a soft-law framework to mitigate environmental impacts and decrease its risks. EPs are a bold step for further sustainable development in the financial sector, denying propositions that do not comply with the framework standards. This finding indicates that the EPs are part of the incremental progress in sustainable development in the competitive financial market.
- 2) The EPs are a valuable initiative especially in countries where laws and due processes for SD have not been well established.

The recommendations include:

- 1) Financial institutions should acknowledge the global and long-term nature of SD issues with the understanding that society views the banking system as a fundamental social infrastructure.
- 2) For further SD, EPs might want to consider:
 - a) revamping the form of EPs Association and establishing evaluation and monitoring processes for further development of EPs,
 - b) creating more positive relationships with external stakeholders,
 - c) incorporating financial technical support system for carrying out borrower's duties, and
 - d) providing information in more depth to the social consensus.

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Abbreviations

ADB	Asian Development Bank
BIS	Bank for International Settlements
BOT	Build-Operate-Transfer
CBD	Convention on Biological Diversity
CDP	Carbon Disclosure Project
CEO	chief executive officer
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COP	communication on progress
CSR	corporate social responsibility

EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECA	export credit agency
EDC	Export Development Canada
EFIC	Export Finance and Investment Corp
EHS	environmental health and safety
EKF	Eksport Kredit Fonden
EMP	environmental management plan
EPA	environmental protect agency
EPs	Equator Principles
EPFI	Equator Principles Finance Institution
ESRM	environmental and social risk management
ESG	environmental social governance
Ex-Im Bank	Export-Import Bank of the United States
FDI	foreign direct investment
GHG	greenhouse gas
GRI	Global Reporting Initiative
IFC	International Finance Corporation
ILO	International Labor Organization
INCR	Investor Network on Climate Risk
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
MDB	multilateral development bank
NCD	Natural Capital Declaration
NGO	non-governmental organization
OECD	Organisation for Economic Co-operation and Development
OHCHR	Offices of the High Commissioner for Human Rights
PFI	private finance initiative
PPP	Public Private Partnership
PURPA	Public Utilities Regulatory Policies Act
RI	responsible investment
SARA	Superfund Amendments and Reauthorization Act
SD	sustainable development
SPE	single purpose entity
TBL	triple bottom line
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNEP FI	United Nations Environmental Programme Financial Initiative

UNFCCC	United Nations Framework Convention on Climate Change
UNGC	United Nations Global Compact
UNIDO	United Nations Industrial Development Organization
UNIFM	United Nations Development Fund for Women
UNODC	United Nations Office on Drugs and Crime
UNPRI	United Nations Principles for Responsible Investment
U.S. SEC	The United States Securities and Exchange Commission
VEP	voluntary environmental program
WB	World Bank
WBCSD	World Business Council for Sustainable Development
WBG	World Bank Group
WCED	World Commission on Environment and Development
WSSD	World Summit on Sustainable Development

1 Introduction

1.1 Background

The recent event, United Nations Conference on Sustainable Development (UNCSD) also known as Rio+20, held in June 2012, discussed sustainable development (SD) and reducing poverty in developing countries as well as engaging in further environmentally considered development steps for a better future, not only for our generation but also for future generations. Despite a critique not to define any specific terms, the main contents of the outcome document “The Future We Want” includes: 1) agreement that a green economy is an important instrument in attaining SD which is acknowledged as a common effort for all countries to pursue, 2) the establishment of a high level forum on SD, 3) agreement on 26 sectorial initiatives, 4) the launch of a negotiation process for government-level talks on SD goals, and 5) an arrangement to produce a report on SD financing strategy by 2014 (Clemencon, 2012; UNCSD, 2012). In addition, side events of the Rio +20 flourished with a multitude of fresh and existing voluntary commitments associate with SD. For instance, the Natural Capital Leadership Compact was signed by 15 major international corporations¹ to assess natural capital property and strive to maintain its natural resource. As a governmental initiative relating to the financial sector, the UK Department for Environment Food and Rural Affairs announced a bold move by introducing Key Performance Indicators Guidance and greenhouse gas (GHG) Reporting. It intends for all listed businesses on the London Stock Exchange to disclose their GHG and other environmental indexes; water, waste, materials, biodiversity and ecosystem services so that investors are able to avail of it for their considerations (Clark, 2012; Gifford, 2012). A new prospective engagement from a financial industry is the Natural Capital Declaration (NCD). The CEOs of 37 worldwide financial institutions² declared to join forces and value natural assets properly in the financial sector around the world. Its establishment originated in a sense of being aware of an emerging risk that the natural capital may have a potential impact not only on specific financial products but also on long-term growth (Natural Capital Declaration, 2012).

Rio+20 was not the first United Nations (UN) conference on SD to review the progress of SD and reaffirm political commitment -- roughly every ten years, UN SD conference has been convening. It marked the 40th year since the Stockholm Conference, the very first international conference on environmental matters, was held in June 1972. The UN Conference on the Human Environment also known as the Stockholm Conference produced major outcomes including the Stockholm Declaration with its 26 principles for its Action Plan and 109 recommendations as well as the establishment of the UN Environment Programme (UNEP). Eleven years later, in 1983, the World Commission on Environment and Development, known as the Brundtland Commission, was inaugurated and published *Our Common Future* in 1987. The report linked development and environmental issues (Economist, 2012, June 23). The UN convened the UN Conference on Environment and Development, also known as the Rio Summit or Earth Summit in 1992. Three agreements: Agenda 21, the Rio Declaration on Environment and Development, and the Statement of Forest Principles, were arranged, and two important binding agreements were reached: the Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD). The same year saw an introduction of the UNEP Statement by Banks on the Environment and Sustainable

¹ Alstom, AngloAmerican, ARUP, ASDA, AVIVA, Grupo Andre Maggi, Kingfisher, Mars, Natura, Nestle, OLAM, SABMiller, Unilever, Volac, and Votorantim.

² Examples are National Australia Bank, Nedbank, International Finance Corporation, Rabobank, PaxWorld Management, UniCredit, Sumitomo Mitsui Trust Holding, and Standard Chartered.

Development in response to UNEP affirmation of a financial sector's significant contribution for SD: reliable future profitability and preservation of the environment. Ten years later after the Rio Summit, 2002, the World Summit on Sustainable Development (WSSD) or the Johannesburg Summit was organized in South Africa to "adopt concrete steps and identify quantifiable targets for better implementing Agenda 21" (United Nations [UN], 2006). The conference adopted the Johannesburg Declaration on Sustainable Development and the Johannesburg Plan of Implementation. These conferences are only a few examples of paths to international SD that the financial industry take part in.

1.2 Problem

Throughout the UN conferences, the global scale of the environmental problem is high on the agenda continually. The acceleration of economic development through globalization and advanced technological innovations have brought incomparable material affluence and the long-term negative result of potentially destroying this affluence for future generations. It is clear that without proactive worldwide corporate initiatives, ways of coping with global environmental problems will not be found; therefore, in the early 1990s, UNEP began to associate with financial institutions after realization that participation from the financial industry was essential to enhance further SD. In order to alter the society structure to a sustainable one, involvement of financial industry is mandatory for redesigning the money flow (Jeucken, 2001). Although banks hardly produce a direct environmental impact compared to other sectors, their lending and investment businesses have ties to other inextricable commercial activities that produce and emit products detrimental to a sustainable society (Smith, 1994). There is a high intensity of environmental loss as a consequence of the nature of large-scale projects particularly in emerging markets (Marco, 2011). These indirect environmental impacts may result in environmental risks threatening their businesses. In other words, the environment related risks turn into inimical risks for the financial institutions (United Nations Environment Programme Finance Initiative [UNEP FI], 2010) (Figure 1-1).

Although appropriate approaches, policies, and initiatives to avert the environmental risks to the financial sector ought to be considered for preventing uncertainties over future business, there is a challenge that optimized mitigation plans for SD are still not entrenched in the financial sector (Wilson, 2010). In lieu of just being bidding, some banks have made steps by joining an environmental initiative in a specific product area; for example, project finance transactions where banks are frequently exposed to numerous amounts of risks so that they can be assented as both responsible and sustainable (Conley & Williams, 2011). It is called Equator Principles (EPs) and is a framework to determine environmental and social impacts, diminish its risks, and to create a level playing field in the project finance business (Mulder, 2010). During the nearly ten years that have passed since EPs' introduction to commercial banks, it has been criticized for being a self-regulatory program without any certifier (Conley & Williams, 2011) in which both EPs signatories and their borrowers repeatedly lack of principles implementations including a monitoring activity (Macve & Chen, 2010).

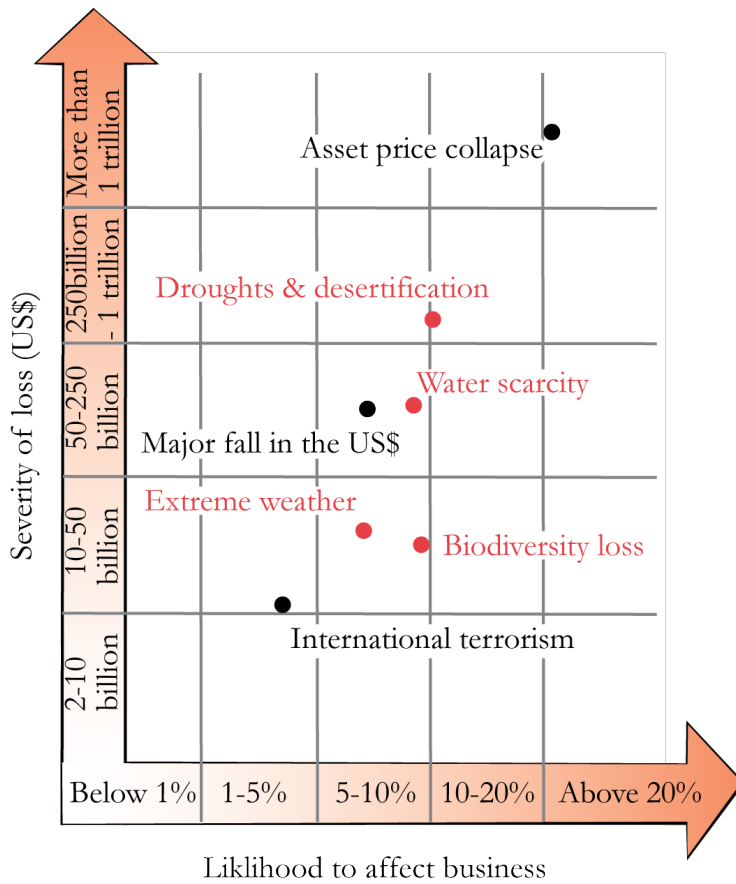


Figure 1-1. Likelihood to affect business with severity of loss

Source: World Economic Forum (2010)

1.3 Objective and Research Questions

In order to address the problems above, the goals of this paper are to investigate: 1) SD and VEP and 2) EPs in particular as it incorporates environmental principles into lending activity. It is worthwhile to examine the impacts and developments of the EPs, SD, and VEPs mechanism as well as to study how some EPs signatory banks utilize the EPs.

This paper is anticipated to make some contributions to current discussions and research conducted by different stakeholders who help building the EPs into project finance lending activity. It is also expected to utilize relevant and specific research methods. Therefore, the following research questions are raised and are going to be discussed:

1. How are the EPs being viewed with regard to achieving sustainable development?
2. How have the expectations of the EPs been fulfilled; is there any difference between developing and developed countries?
3. How should the EPs be modified further to assist sustainable development or sustainable banking?

1.4 Methodology

To address the above research questions and objectives, a qualitative research method was exercised during development of the thesis. It includes literature review, personal interviews, case study, focus area research, and research analysis.

The **theoretical review** aided the conceptualization of the topics by identifying norms of project finance and SD, the position of the EPs in VEP, and reasons to join the EPs. The analysis section was to assay the development of the EPs and explore current utilization at EPs Financial Institutions (EPFIs). It was based on conceptual frameworks: Club Theory (Potaski & Prakash, 2007) found attributes to assort VEPs to different groups and Institutional Theory (King & Lenox, 2000) demonstrated three distinct motives for banks to adopt the EPs.

Literature review was the main source for data collection to develop the thesis and define the theoretical background in the roles of financial institutions, SD, project finance, and VEPs. It examined how banks employ the EPs, what environmental impact had been concerned, and what drove banks to proactively move towards becoming a sustainable institution. Parts of work included reviewing financial institutions that had established VEPs relevant standards and cases regarding mitigating environmental impacts and risks together with environmental assessments at different organizations such as the World Bank (WB) and the International Financial Corporation (IFC). Books familiarizing the topics of project finance and general financial terminologies assisted to fill the knowledge gap and to comprehend the subjects better.

Personal interviews conducted with variety of personnel in different roles, departments, and organizations. The methods were both structured and semi-structured face-to-face interviews, semi-structured phone interviews as well as structured e-mail questions. The interviews supported to fill the gaps of the publicly available documents about SD and EPs. However, most of interviewees preferred to be anonymous and off the record. Thus, most of gathered opinions weren't cited in this paper but gave the author insight into the financial sector.

The **case study** was to seek out appropriate paths toward a sustainable finance system and its development. One of the VEPs', Equator Principles was chosen to delve deeper into. Their current status, history, and the main drive towards sustainability were studied through literature reviews and interviews. To demonstrate a potential pathway for sustainable finance through the strengthening of current environmental policy and initiative, one of the EPFIs was selected to examine progress beyond compliance as a private bank.

Based on the examinations, the interviews, and the theoretical reviews, this section was designated for deeper **analysis and discussion** to illuminate how the EPs were utilized to advocate global sustainable finance. Comparisons of different environmental impact mitigation mechanisms among export credit agencies (ECAs), MDBs, and EPFIs were made.

1.5 Scope and Limitations

1.5.1 Scope

Dissimilar financial institutions including investment banks, corporate banks, retail banks, savings institutions, mortgage institutions, multilateral developmental banks, bilateral developmental banks, and export credit agencies, were at play. This paper focused on financial services that closely work with industries, particularly a project finance division that had a close relationship with significant environmental impacts.

VEPs were found in distinct banking businesses: investment, insurance, fund management, and stock exchange. Their size varied from the national level to the global level. This thesis concentrates on the international VEPs and Equator Principles in project finance of lending business.

The terms of sustainable development were used in different ways by interviewees with dissimilar educational backgrounds and occupations. To be consistent, the term was employed to describe environmental impacts involving banks including, environmental performance, environmental responsibility, and environmental action. In addition, predominantly indirect and reputational impacts were discussed rather than direct impacts due to the nature of project finance businesses.

1.5.2 Limitations

Detailed information on lending activity at commercial banks was hard to acquire due to its confidentiality. The interviews had limitations in extracting details, as the project finance business is very competitive. Inquiries were sent by e-mail in advance to potential interviewees. Some of them turned down the planned interviews due to the confidentiality concerns or internal regulations. The majority of interviewees preferred to be anonymous and requested to carry out the interview off-the-record. Their main concern was that their answers shouldn't be viewed as official statements for their organizations.

Multiple personal interviews were conducted for validation reasons. In other words, a single interview could be viewed as biased information. Therefore, interviews were treated as supplemental sources while publicly available materials were used as primary sources to develop this thesis.

Additionally, being a non-staff member at any financial institution meant available information was very limited to publicly available documents besides interviews and additional printed materials provided by interviewees.

Draft version of the Equator Principles III was released on August 13, 2012 for stakeholder consultation and public comment and remained to open until October 12, 2012. Hence, no literature review based on the EP III was found. All literature review utilized in this paper was in accordance with the EPs I and II.

1.6 Audience

The audience of this paper includes people who work in the lending business as well as those who work with environmental management at financial institutions to increase their understanding of how SD is linked to their work in different levels and fields.

1.7 Outline

As the stated methodology above, this paper consists of eight chapters:

Chapter 1 constructs an introduction to the thesis topics by identifying problems and background and presenting the research questions, methodology, scope and limitations.

Chapter 2 is a theoretical review of SD and sustainable finance. It begins with understanding SD and the roles of financial institutions in society, followed by environmental impacts and risks for financial institutions.

Chapter 3 explores a theoretical review of project finance: its paths, definition, and types of risks.

Chapter 4 gives a theoretical review of both CSR programs and VEPs with its examples, including the UN Global Compact (UNGC), Global Reporting Initiative (GRI), UN Principles for Responsible Investment (UNPRI), UN Environment Program Financial Initiative (UNEP FI), Investor Network on Climate Change (INCR), and Natural Capital Declaration (NCD).

Chapter 5 introduces EPs as a case study that involves SD, project finance, and VEPs in conjunction with sustainability work at WB and IFC.

Chapter 6 and 7 involve analyses and discussion. It is based on the research from previous chapters as well as conceptual frameworks for identifying barriers, challenges, and potential opportunities and taking a look at cases to illustrate well-utilized EPs frameworks.

Chapter 8 concludes this paper and makes suggestions.

2 Sustainable Development and Sustainable Banking

The global scale of environmental problems is one of the biggest challenges we encounter in modern society. The acceleration of economic development through globalization and advanced technological innovations have brought incomparable material affluence and the long-term negative result of potentially devastating this affluence for future generations. It is clear that without proactive corporate initiatives, ways of coping with global environmental problems will not be found. It indicates that the involvement of financial assistance to support corporate activities has critical power. However, the financial sector up till now has been paying more attention to how to make the value of its assets swell instead of deeming what impact financial market behavior has on society. Through the consequences of financial games such as Lehman's fall and other financial industry scandals, financial institutions have undertaken to reconsider their social responsibility and its significance. This chapter goes into how financial institutions and its markets are an essential part of the sustainable development (SD) pillars.

2.1 Sustainable Development

The industrial revolution of the eighteenth and nineteenth centuries made radical changes in the areas of agriculture, manufacturing, mining, and transportation with new technologies on a scale never before imagined. It produced not only positive changes to society, but also negative ones, such as air pollution and deforestation. These modifications ushered in a different period of time from the previous one: the industrial revolution's emphasis and priority was on the economy and disregarded environmental consequences. In other words, it unlinked any trade off between the environment and the economy. Following this, the twentieth century turned into the era of antagonism. Severe environmental damage led to the deterioration of the environment as evidenced by the increased consumption of chemicals and mass-produced cars (Kasa, 2009). Attempting to not keep running the society through a disconnected economy, the concept of SD was introduced³. It became prominent in 1980 in the World Conservation Strategy published by the International Union for Conservation of Nature (IUCN). Later, the term received a fair amount of attention by Our Common Future, also known as the Brundtland Report published by the UN World Commission on Environment and Development (WCED) in 1987. It has been cited repeatedly after this publication despite several more definitions (Reid, 1995). For consistency, this paper applies the WCED definition:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

-the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and

-the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs (World Commission on Environment and Development, 1987).

The report was a milestone because it discussed subjects that never had been debated on the same table; linking environment and development to create actions on all levels; from global to local for all generations - past, present and future (Weiss, 1993). As a matter of fact, one third of economic communiqué at the G7 Summit was regarding global environmental issues

³ The credit for the invention of the term goes to Eva Balfour, founder of the Soil Association; to the International Institute for Environment and Development and to Wes Jackson, the American geneticist and biodynamic farmer.

the following year. Realization of the systematic approach allows integrating three dimensions of SD -- social, environmental, and economic -- simultaneously (Sneddon, Howarth & Norgaard, 2006).

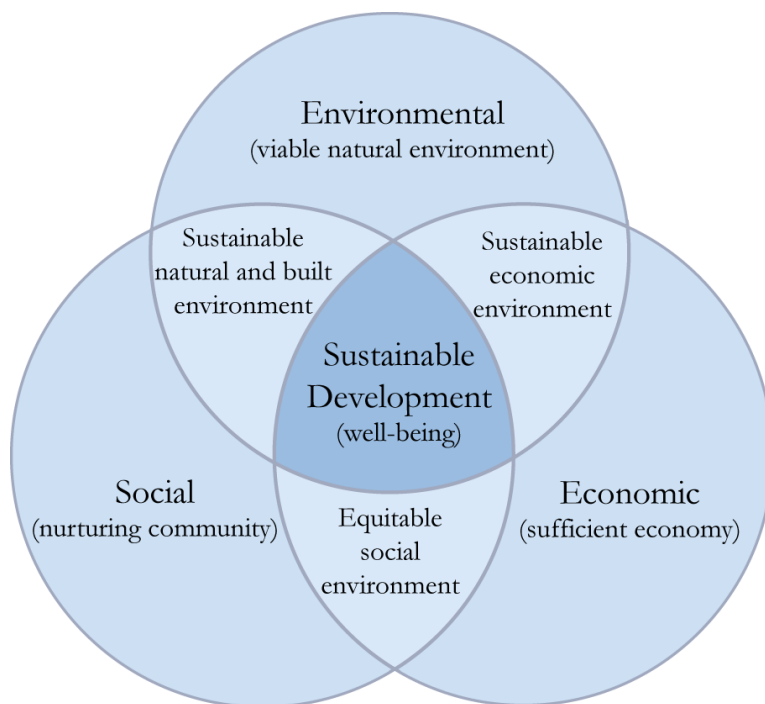


Figure 2-1. Concept of sustainable development

Source: Massachusetts Institute of Technology (2006)

Despite Agenda 21 from the Earth Summit in 1992, there is a ‘common vision’⁴ instead of a legally binding treaty. It arranges how to tackle problems of economic development, social equity, and resources conservation that are no longer standing alone as problems; it is the foundation of the SD definition (Clemencon, 2012). These are discussed as examples of challenges in environment and development: economic disparity, political instability, extreme poverty, under-nourishment, disease, marginalization, population growth, consumption, global energy use, climate change, nitrogen loading, natural resource deterioration, loss of diversity, pollution, growing water scarcity, and other urban problems (Organization for Economic Co-operation and Development [OECD] & United Nations Development Programme, 2002).

2.2 Roles of Banks

In the current economic society, money moves, in one way or another; sometimes to individuals from companies and other times it is to government from individuals. It is the vital element for economy and society, like blood circulation. This system is called money flow (Robertson, 1999) (figure 2-2). Economic activities are mediated by money so that it is a part of the SD relationship to not carry on current existing environmental problems and shift the independent pillars to one overlaid social mechanism. Thus, in order to alter the society structure to a sustainable one, redesigning the money flow is pivotal and a financial responsibility for the environment (Jeucken, 2000).

⁴ As Tariq Banuri, director of the United Nations’ Division for Sustainable Development described it, “Agenda 21 is not a binding treaty. It sets out a sort of common vision. Agenda 21 is trying to say that environmental concerns are common concerns of everyone on this planet.”

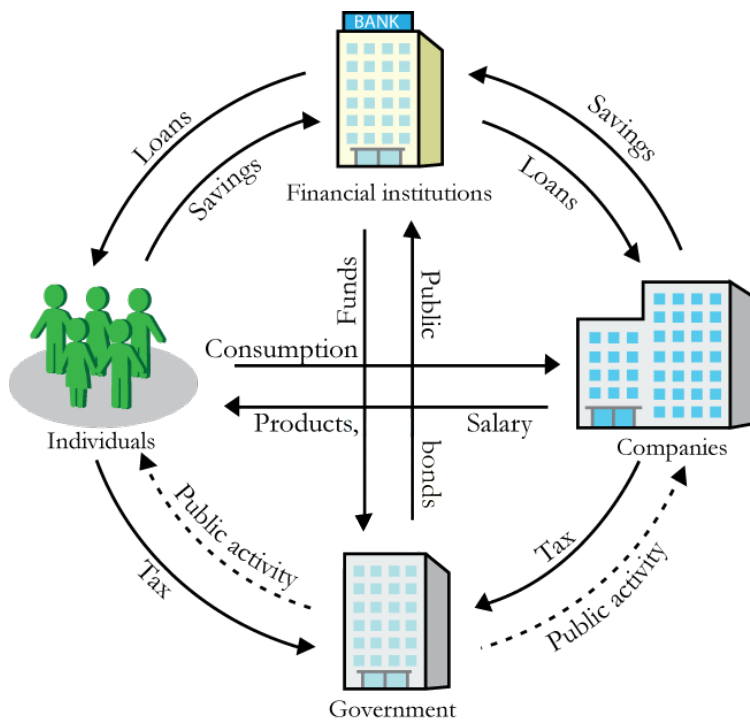


Figure 2-2. The role of financial markets in the economic system

Source: Adapted from Jeucken (2000)

There are two techniques to finance: **direct finance** raises funds by issuing bonds and stocks, and **indirect finance** grants the rights to corporations and governments borrowing money through banks (figure 2-3). The indirect finance is the centerpiece method and is characterized by the existence of intermediaries; banks and other financial institutions, having no direct business relationship between borrower and lender (Jeucken, 2000).

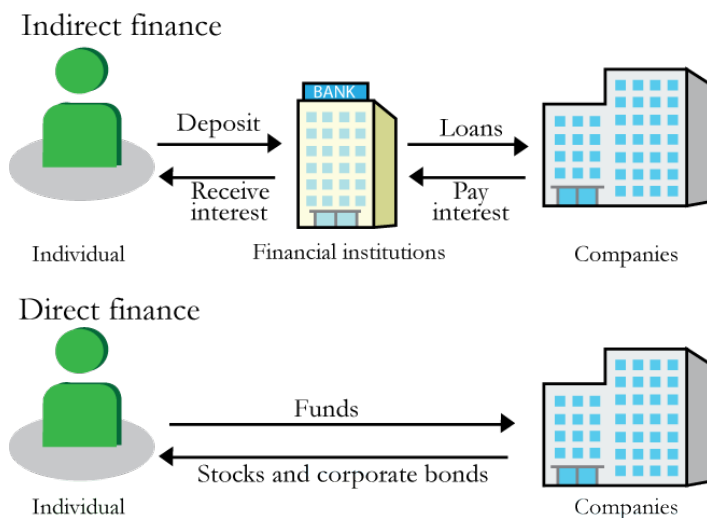


Figure 2-3. Direct and indirect finance

Source: Adapted from Jeucken (2000)

Banks as defined “institutions whose business is to receive deposits and/or close substitutes for deposits and grant credits or invest in securities on their own account” (Bank for International Settlements [BIS], 2000) play five significant roles: information service, liquidity service, price-risk reduction service, transaction-cost-reducing service, and maturity intermediation service; therefore, they are the most significant financial intermediaries all around the world. (Jeucken, 2000).

According to Jeucken (2000) the bank is categorized into two kinds: **depository institutions** lend out most parts of their trusted funds as loans and mortgages and **non-depository institutions** issue securities on the capital market and charge customer fees on the activity.

Table 2-1. Types of financial institutions and its roles

Depository Institutions	Commercial banks	Give loans to their customers and business customers and distribute profits to shareholders. Corporate banking: Generally, the provision of debt-based finance and the acceptance of deposits from the corporate sector. Retail banking: Personal banking services, including check-writing, savings accounts, and automated banking services.
	Saving institutions	Specialize in home financing and savings. Institutions accept deposits and pay interest, financing its operations by on-lending deposits to other financial institutions or through wholesale investment.
	Cooperative banks & credit unions	Owned by members that do not focus on making profit. Provide credit.
Non-depository Institutions	Securities market institutions	Capital market transactions, advice, and services
	Investment institutions	Invest in securities and loans with higher risks on behalf of corporations and governments.
	Contractual saving institutions	Provide protection.
	Multilateral and governmental financial institutions	Organized by a government or a number of governments to stimulate economy. WBG: Make loans to borrower governments for projects that promote economic and social progress. (IFC): Encourages FDI in developing countries. ECAs: Generally government-owned agencies providing insurance to exporters against non-payment of contracts and credit to buyers.

Source: Jeucken (2000) & UNEP (1999)

2.3 Sustainable Development in the Financial Sector

The conventional economic mechanism does not properly take into account the existence of future generations. For this reason, numerous environmental matters are discussed as economic externalities. By contrast, the environmental factors are reflected in the price as a part of the functions of financial markets under the SD concept because SD is an efficient mechanism to utilize the financial capability. Regarding the financial activity as an instrument to achieve timeless and efficient resource allocation, it is less complicated to apprehend how the activity has a close relationship with a path to SD. There are mainly two functions of

environment-friendly finance as known as environmental finance⁵; 1) to employ direct financing in investments and loans to diminish environmental impact for new methods of energy-saving, new energy equipment, and environmental venture business and 2) to work as an entity that evaluates and endeavors to incorporate environmental consideration into corporate behavior to encourage investment and loans such as environmental financing rating and social responsible investment (SRI)(Hunter, 2008). For example, some European banks in the mid 1990s developed environment-friendly financial products and processes to assess the environmental risks prior to decision-making for financing. In the late 1990s, some of these banks emphasized that their lending decision was based on management, legal compliance, and other environmental criteria for lending to corporations with good environmental performance (Buck, Helmchen & Moltke, 2002). The financial institutions should take up the global scale and long-term SD issues with the understanding that the banking system is given from society as a fundamental social infrastructure. To contribute to SD and its economy that is the basis of its own existence, financial institutions actively work in the environmentally and socially related investment and lending business, environmental risk management, information disclosure, and accountability. It becomes a major driving force for taking responsibility in both SD as well as social responsibility. Lastly, to discuss SD thoroughly, it is imperative to make a clear distinction between two terms: sustainable finance and responsible investment (RI). RI has developed based on ethics whereas sustainable finance is the investment and lending business taking environmental social governance (ESG) issues into account (Peeters, 2003).

2.3.1 Paths to Sustainable Banking

Initiating more changes in sustainable development entails adjustments from the current stand-alone type of banking system to an interacting style where all types of organizations and systems are interconnected to jointly make further actions in a low-carbon, climate resilient, resource efficient, and valued ecosystem for all people and its society (Sneddon, Howarth, Norgaard, 2006). Jeucken (2000) proposes four different levels towards sustainable banking for banks.



Figure 2-4. A typology of banking and sustainable development

Source: Jeucken (2000)

Defensive banking: A bank under this stage is not active in environmentally focused business or any such related activity including cost saving initiatives and environmental management in general. They may even attempt to delay or oppose any change outside of the

⁵ In the late 1990s, the term Environmental Finance had become a term to describe environmentally friendly financial activity and it became more common through the media. The term is used as a concept to include market-based financial instruments for the purpose of transferring risk and the environmental preservation of environmental quality.

bank that may affect them, such as new environmental laws. At this stage, no bank can make a profit from it; therefore, environmental care is seen as a cost to them.

Preventive banking: Unlike the previous stage, potential environmental cost savings, eco-efficiencies, environmental management, and credit risk assessment are actively necessitated. However, it's only valid internally. Potential revenues, costs, and risks are integrated into their daily business. Stakeholders such as the government and NGOs have more connections to the bank's business both directly and indirectly through legislation, social pressure or jurisprudence.

Offensive banking encompasses external activities on top of the internal activities from the previous stage such as the development of publicly available environmental reports, environmentally friendly products including environmental investment funds and financing sustainable energy, and enrollment in voluntary environmental programs. The stance distinguishes its position from the two previous stages by being proactive, creative, innovative and looking for win-win solutions. However, a negative environmental cost isn't fully integrated into their system yet.

Sustainable banking is the best scenario and win-win situation. Both negative and positive environmental costs are internalized in their business and price systems. They look for sustainable products such as a high sustainable rate of return while being profitable in the long-term. In other words, they tolerate and understand the complication in earning a high-margin in a short term. The bank also requests their shareholders to accept the same vision and ambition as they do to pursue their sustainable banking business.

2.3.2 Environmental Impacts

Six banks including Australia's Westpac Banking Corp. and French Credit Agricole SA were nominated for the 2012 Global 100 Most Sustainable Corporations in the World (Global 100, 2012). To be selected as a sustainable corporation is a high honor; however, criteria and weights to determine the rank ignore several indirect environmental impacts⁶. The financial industry contributes to the indirect environmental impacts more than direct environmental impacts compared to other industries such as manufacturing (Jeucken, 2001).

Direct impacts at a financial institution are mainly from the operational activities including energy use for heating and lighting the building, water and paper usage, waste disposal, and the transport of employees and materials. Even for financial institutions, energy conservation and waste and emission reduction have become an internal mandatory management (Jeucken, 2000). Compared to the relatively small contribution of the direct impact, indirect impacts could be more exponential. Of course it is important to have less direct impacts internally but mitigating the indirect impacts is a step for financial institutions towards SD (Peeters, 2003). Most **indirect impacts** are the results of commercial activities by a bank's clients based on funds borrowed from the bank. It is troublesome for a bank as an external stakeholder to control clients' environmental impacts, but environmental impacts of the borrower may lead to financial, legal, operational or reputational risks (FORGE Group⁷, 2000). Industries with high environmental impacts such as the mineral extraction, manufacturing, and transportation

⁶ Eleven key performance indicators: energy use, GHG, water use, waste productivity, innovation capacity, taxes paid, CEO to average employee pay, safety productivity, employee turnover, leadership diversity, and clean capitalism paylink.

⁷ It is an association of British financial institutions; Abbey National, Barclays, CGNU, Lloyds, TSB, Prudential Plc, Royal Bank of Scotland, and Royal and Sun Alliance.

industries rely on financial support from financial institutions due to expensive initial implementation costs to start operation.

2.3.3 Sustainable Banking and Environmental Risks

In the 1980s, environmental issues began to be identified as a significant corporate risk after a spate of lawsuits asked for liability from financial institutions as a part of the funders of pollution. Nowadays, environmental risk is considered a part of credit risks to screen for before an appraisal of the lending business. Environmental risk is considered a potential cost and liability for bank clients, especially in environmentally sensitive industries. It is worth assessing the risk prior to an appraisal. Environmental risk has been defined in more than one way as a result of different areas and scopes. An appropriate definition of the environmental risk for this paper on sustainable banking with a particular focus on lending operations of the banking industry is “financial risks that may affect the present value of their loan portfolio” (Smith, 1994). Three classes of environmental risks: direct, indirect, and reputational risks, can affect and damage the performance of each financial institutions (Thompson, 1998a; Thompson 1998b). Furthermore, it reflects on regulations that could affect the overall operation of the financial sector. Environmental risk is even described in the Basel II: International Convergence of Capital Measurement and Capital Standards that shows the growth of international recognition of environmental issues as a whole financial sector.

Basel II – International Convergence of Capital Measurement and Capital Standards

*Clause 510. Additional collateral management requirements are as follows:....The bank must appropriately monitor the **risk of environmental liability arising in respect to the collateral**, such as the presence of **toxic material on a property**.*

*Clause 518. The bank must maintain a continuous monitoring process that is appropriate for the specific exposures (either immediate or contingent) attributable to the collateral to be utilized as a risk mitigant. This process may include, as appropriate and relevant, ageing reports, control of trade documents, borrowing base certificates, frequent audits of collateral, confirmation of accounts, control of the proceeds of accounts paid, analyses of dilution (credits given by the borrower to the issuers) and regular financial analysis of both the borrower and the issuers of the receivables, especially in the case when a small number of large-sized receivables are taken as collateral. Observance of the bank's overall concentration limits should be monitored. Additionally, **compliance with loan covenants, environmental restrictions, and other legal requirements should be reviewed on a regular basis** (BIS, 2005).*

A **direct environmental risk** arises with land a bank possesses as collateral for a loan. The presence or absence of soil contamination affects the value of the collateral; therefore, it may lead to risk management of a financial institution. The credit risk consists of the risk when the customer acquiring the loan falls behind in their payment after being forced into unexpected expenditures by orders to clean up contaminated soil and groundwater, being obligated to pay compensation for damage and loss, or experiencing severe cash flow problems as a result of a catastrophic accident that leads to a loss of market share. Collateral risk is the risk of difficulties to collect the expected level of payment due to lost initial value of contaminated land as collateral. Lender liability risk is the risk that a financial institution itself is asked to take in cleanup liability either for actions of selling contaminated land to, or management participation in, a company that causes contamination. All potentially responsible parties involved in the hazardous substances have an obligation to take expenses of the cleanup (Jeucken, 2000). The contaminated site nuisance can lead to borrower's depreciation of assets, increased repair costs, and lost opportunities for revenue. All matters in question can result in affecting credit risk, collateral, or guarantees of the bank.

In the 1980s, the Comprehensive Environment Response, Compensation, and Liability Act (CERCLA) in 1980 and Superfund Amendments and Reauthorization Act (SARA) in 1986 came into effect. Since then, the U.S. Environmental Protection Agency (EPA) has been responsible for the investigation and remediation of soil contamination up until confirming the responsible party for the contamination. The cleanup cost is disbursed from the superfund funded by the petroleum tax among others. It states that the potentially responsible parties include not only any current facility owner or administrator but also all of the people involved at the time of disposal of the toxic substances; previous owners, polluters, transporters as well as financial institutions that lent funds previously (Peeters, 2003). The two laws resulted in stricter lending as financial institutions preferred to avoid the liability risk and bankruptcies of loan borrowers after holding the cleanup liability. One case was the U.S. versus Fleet Factors Corporation in 1990 to 1991. It was the first case where it was established that the bank bears costs and takes culpability.

Indirect environmental risk is a more recurrent risk for banks to be involved in. It may make a borrower default on a loan and reach the amount of the loan principal. For example, underproduction in agriculture due to climate change and the introduction of an environmental tax have lasting effects; and uncontrollable changes that do not yield a profit after paying the taxes, puts the survival of the business into question, and can force a company to go out of business (Thompson, 2004). Jeucken (2000) identifies six different environmental aspects that can threaten the existence of corporations: 1) amending governmental requirements, 2) altering the market environment, 3) changing external environmental conditions, 4) private liability, 5) government sanctions, and 6) criminal prosecution. For instance, a large-scale pulp mill construction project in Indonesia intended to manufacture products for the European market but was opposed due to European consumers' opposition because building the plant would disrupt the rainforest. The plan fell through after the Indonesian government denied the social license to operate. In the end, the banks involved in the project had significant problems.

The third type of risk for financial institution is **reputational risk** regarding banks' reputations and negative publicity (Jeucken, 2000). Naturally, no bank should overlook credit risk, but with indirect environmental involvement a bank is very vulnerable with an increased likelihood of receiving public criticism and negative reactions from customers. Reputational risk occurs when a bank lends to a corporation suspected of performing an environmentally harmful activity, and stakeholders reacts by asking the bank to take its responsibility for the lender activity (Robertson, 1999). The difficulty of reputational risk is although banks do not get involved in the corporate management of the lender directly, in contrast to the direct impact, the bank is still affected by the risk (Buxton, 1997). If the bank cannot stave off the negative spiral, the risk may lead to a continual loss of existing customers, and/or failure to acquire new customers, and further influence overall corporate management issues. To keep their corporate image clean, banks have been aware of the importance of reputational risk (Peeters, 2009). A significant key to lessening such risk as a bank involves, is to be familiar with the internal and external stakeholders of the bank (figure 2-5) (Jeucken, 2000).

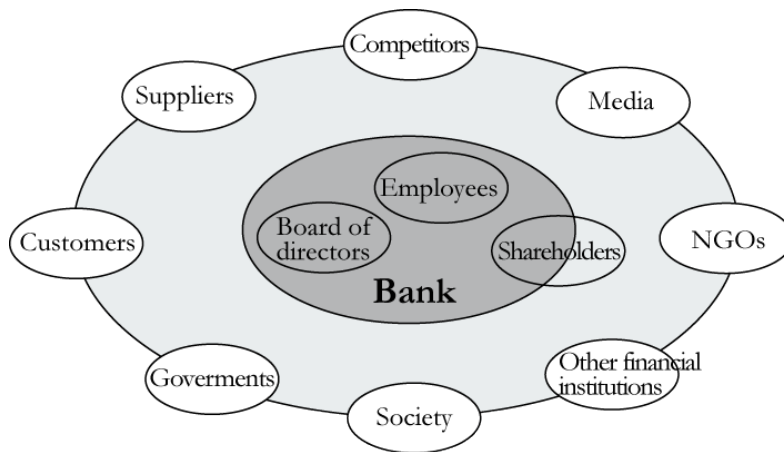


Figure 2-5. Internal and external bank stakeholders

Source: Jeucken (2000)

Each stakeholder is somehow linked to a financial institution. For example, some environmental NGOs appeal to financial institutions to engage better in sustainability based on the Collevocchio Declaration⁸. With the help of specialists, many major financial institutions have taken one or more steps by building systems to observe how the environmental impacts influence their corporate management and risk management procedures.

⁸ In January 2003, 102 environmental NGOs gathered to declare six Commitments to financial institutions in Collevocchio, Italy. 1) Commitment to sustainability, 2) Commitment to "Do Not Harm" according to a precautionary principle, 3) Commitment to responsibility, 4) Commitment to accountability, 5) Commitment to transparency, and 6) Commitment to sustainable markets and governance.

3 Project Finance

In general, it is said that the collapse of Lehman Brothers in 2008 was a turning point for the project finance business with significantly fewer numbers of projects closing as well as fewer numbers of loans in general. Banks became more careful about incurring risks due to the financial crisis. Under these circumstances and considering any future uncertainty, it is more problematic to launch ultra long-term finance products with a repayment period of a few decades than short-term products. Other banks that not only cannot hold long-term claims but also are not able to lend for any new projects, have made decisions to put on sale their departments to other financial institutions. The Royal Bank of Scotland made headlines in 2010 when it agreed to sell their project finance department to Tokyo Mitsubishi UFJ Financial Group is one occurrence⁹.

3.1 Definition of Project Finance

Project finance can be interpreted both narrowly and broadly. This paper follows the definition from the Basel Committee on Banking Supervision, International Convergence of Capital Measurement and Capital Standards (Basel II), 2005:

221. Project finance is a method of funding in which the lender looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the exposure. This type of financing is usually for large, complex and expensive installations that might include, for example, power plants, chemical processing plants, mines, transportation infrastructure, environment, and telecommunications infrastructure. Project finance may take the form of financing of the construction of a new capital installation, or refinancing of an existing installation, with or without improvements.

222. In such transactions, the lender is usually paid solely or almost exclusively out of the money generated by the contracts for the facility's output, such as the electricity sold by a power plant. The borrower is usually a single purpose entity (SPE) that is not permitted to perform any function other than developing, owning, and operating the installation. The consequence is that repayment depends primarily on the project's cash flow and on the collateral value of the project's assets.... (BIS, 2005)

In other words, project finance is a form of financing to process loans for large project developments that are highly capital intensive. Regardless of corporate assets and its creditworthiness, a decision to offer financing to a project is determined by collateral of contract rights of the project, cash flow generated from the specific single project, and assets of the project. Source of repayment is limited only to profit generated from the project. Besides this, there is no governmental payment guarantee and only limited recourse to the parent company. The most distinguishing characteristic of project finance is that the parent company does not make guarantee for the money that the subsidiary company borrows from banks. It means that in regard to the SPE as a borrower being behind in their repayment schedule or no longer being able to make repayment due to the underperformance of the project, the lender has no right to claim any repayment from the borrower's parent company, even if the parent company has sufficient funds available for the repayment. Hence, the project heavily relies on future profitability, and the loan payment depends on the project itself

⁹ In 2010, Mitsubishi UFJ Financial Group Inc (MUFJ) agreed to a deal of purchasing the Royal Bank of Scotland Group plc's (RBS) project finance assets included natural resources, power, and other infrastructure assets located in Europe, Middle East and Africa. RBS previously received a taxpayer-funded bailout by the UK government in 2008 after RBS had a record of huge losses due to the financial crisis. The government sought to sell non-core operations for collecting the recovery fund. The project finance business was included in the list of non-core operations.

rather than business credit (Yescombe, 2002). All these things indicate in the worst-case scenario that the lender has to prepare for severe debt loss. This type of financial technique is called non-recourse finance in contrast to the conventional method where the lender can appeal for direct repayment as recourse finance. In practice, instead of complete non-recourse finance, some cases are financed as limited-recourse finance: the parent company takes a portion of lending related risks and responsibilities and pledges a construction completion guarantee. For these reasons, banks bear risks and may participate from the early planning stage in project finance. The three main project fields are natural resource projects such as mining and oil projects, independent energy projects, and public infrastructure projects including dam and railroad projects (Schepers, 2011).

A project finance loan is given to a **single purpose entity (SPE)** that is founded to conduct one project only as a legally independent project enterprise with no previous credit history. The SPE is one of the consortium shareholders, and no shareholders have obligations of debt repayment in accordance with project finance in principle. The financial arrangements are done by dedicating cash flow generated from the project itself as a core source of repayment based on risk-sharing rights and obligations among all affected parties of the project (Fight, 2005). A project company should be in the SPE form to ensure their plan stays on the designated scheme and excluding any fraud uncertainty. A clearly defined SPE comprises characteristics of 1) a limited project period and 2) distribution of cash flow to equity investors and lenders instead of keeping it as retained earnings (Yescombe, 2002). A principal key to business success is identifying various types of risks and reducing them. It should be shared with and handled by the participating business with the appropriate skill (Figure 3-1).

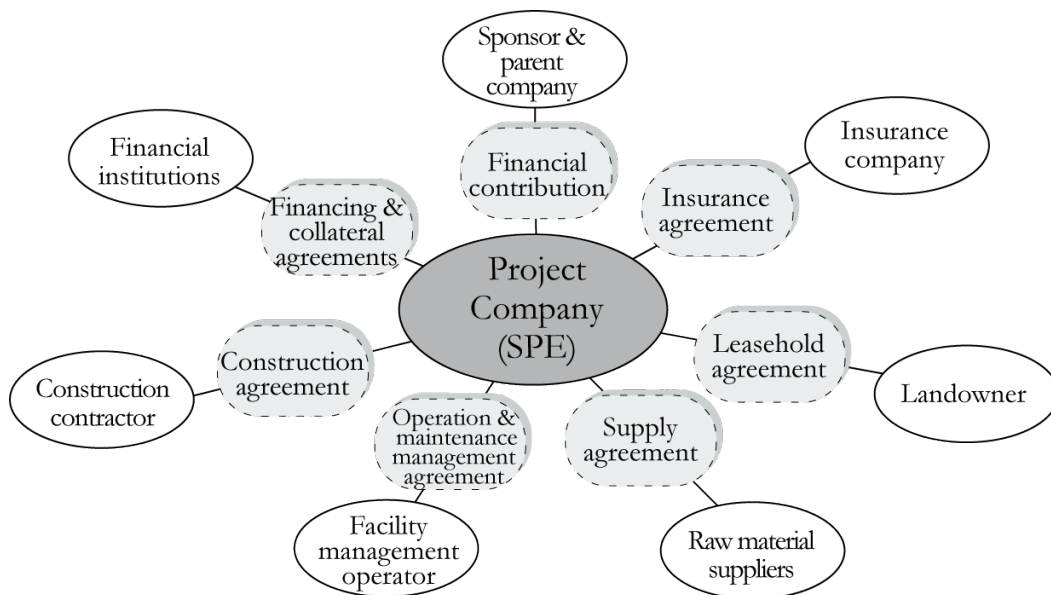


Figure 3-1. Project finance structure

Source: Adapted from Yescombe (2002)

The procedure of project finance is a dynamic process incorporating diversified elements. Lawyers, certified public accountants, and an insurance company are also at the negotiation table with the main two parties: the sponsor and the financial institution. All of them get involved in risk sharing proposals, exchanging all information regarding the proposed project and its risk assessment as well as negotiating the terms and conditions.

3.2 History of Project Finance

The origin of limited recourse finance, which is one of the characteristics of project finance, dates back to 1299 in the United Kingdom¹⁰. Nine centuries later, the economic meltdown that originated in the Wall Street crash of 1929, led to a free-fall in the price of oil and bankrupted small and medium-sized oil companies. Although the oil industry had been considered a growing industry, it became known as risky business (Yescombe, 2007). Because of this, the number of financial arrangements shrank. A form of production payment appeared as an influential financing technique for the crisis-ridden oil industry. It was a type of financing that limits the source of repayment only to future oil out of the designated petroleum mining area. Regarding purchase and sale of the oil mining area, the owner or seller of the area sold the concession as production payment, and the buyer pledged the concession as collateral to seek a financial arrangement from the bank¹¹. The production payment was utilized for oil-well drilling projects of small and medium-sized oil companies with low creditworthiness from 1930 to 1960 (Yescombe, 2002).

Following the production payment, underwriting for relatively small oil field development, financing to large-scale resource development projects began in the 1970s. An example is the development project of the North Sea oil field. Because the recoverable reserves out of the oil field was over one billion barrels, the development fund was worth over US\$ one billion at the time. Though some companies could manage themselves, British Petroleum (BP) had other large-scale development projects besides the Forties Oil Field, a part of the North Sea oil field, that made it inconvenient for BP to start with its own limited assets. Consequently, it raised funds by limited-recourse financing. To appeal for the development fund for the North Sea Forties Oil Field, BP utilized the project finance method to adjust existing borrowed indebtedness. This brought the introduction of project finance into the production payment method¹². Since then, project finance in development of natural resources had expanded target industries and countries. Examples were liquefied natural gas projects in Australia and Indonesia and a gold mining project in Papua New Guinea in the 1980s (Chen, 2005).

The manufacturing industry started to be financed by project finance in the 1980s. In the vanguard of the sector was the wholesale electricity market in the United States. Enactment of the Public Utilities Regulatory Policies Act of 1978 (PURPA) made it possible for any electricity producer to sell electricity to a power provider. It removed barriers for the electricity producer to enter the industry by resolving the market risk, which was the largest business risk. Project finance was applied to fill the gap in lack of its own financial strength. The PURPA promoted the development of an independent power industry in the U.S. by establishing the basis of a long-term agreement for financing construction costs with

¹⁰ The British royal family borrowed money from major Italian commercial banks for development of silver mining. By the agreement, the Royal family transferred one-year period of the management rights of the silver mine to the dealing banks. In return of the silver mine, it assures zero interest rate, but no assurance about the quality of the silver mine. However, it is an example of finance for a limited time period of funds borrowing that high uncertainty and unfair deal for banks. Therefore, the format and implication differ from modern project finance.

¹¹ It was originally short-term inventory finance secured by only produced oil instead of mining itself as collateral. However, the method shifted to long-term financial security including the amount of reserves. Then, the production payment became a standard financial technique for the oil industry. What assisted to develop further was oil price stabilization, progress in oil reserve estimation method, and development of laws; however, the benefits of production payment were lost by the amendment of the U.S. tax law in 1969. Then, the oil industry moved on to another financial method including development of project finance in 1990s and the production payment was utilized as foundation for the project finance.

¹² This project was carried out with a limited-recourse that BP took a part of guarantees for a price fluctuation risk and a reserve risk due to the oilfield development in the North Sea was technically unknown at the time. In effect, BP guaranteed the project but structured to be off-balance sheet by receiving development funds in advance from relevant companies in exchange of oil sales contracts.

non-recourse financing (Chen, 2005). While American banks expanded their business internationally, the project finance technique was also exported to other countries. It was leveraged in the electricity industry of developed countries and for Built-Operate-Transfer (BOT) projects in developing countries. The BOT is a project type in which a company never owns its assets and its project is built and operated by the private project company, then transferred to a governmental body.

In the 1990s, a Private-Finance-Initiative (PFI) style of business began to be actively used in the project finance area. It is a business method to fund and run services, traditionally operated by the public sector with private capital and technical know-how, providing more effective services for public sector projects¹³. Under the PFI, the role of the public sector is as a buyer and authorizer of the provided service. In the traditional public construction business, construction companies could be unaccountable after the completion, so consequently fault compensation is covered by tax. On the other hand, under the PFI, the agreement remains even after the completion (Yescombe, 2007). In the case that revenue is below the standard level, penalties must be imposed on the company. This circumstance drives private companies to enhance operation efficiency. It means that risks held by the private sector have a wider range and longer term. In this manner, the PFI is a mechanism to provide better quality public service.

The BOT and PFI are similar in that the PFI is an improved method based on reflection of the BOT. Both of them have a common purpose, the introduction of the private-public partnership (PPP) scheme and a private method for public work. However, economic efficiency is over emphasized more than anything on the BOT. This biased route produces negative externalities such as pollution, and it results in inhibiting the role of government with a duty to protect common goods¹⁴.

3.3 Structured Finance

Project finance is included in the structured finance¹⁵ that is a result of financial technology to develop mechanisms such as risk analysis to find risks and profitability of a business and to facilitate negotiation on terms and conditions. According to Basel II, structured finance is defined as follows:

Structured finance instruments can be defined through three key characteristics: (1) pooling of assets (either cash-based or synthetically created); (2) tranching of liabilities that are backed by the asset pool (this property differentiates structured finance from traditional “pass-through” securitisations); (3) de-linking of the credit risk of the collateral asset pool from the credit risk of the originator, usually through use of a finite-lived, standalone special purpose vehicle (SPV). Forces driving financial intermediaries’ issuance of structured finance instruments have included reduction of regulatory capital,

¹³ History of PFI began in the UK in 1992 as the purpose of making public works more efficient that a series of administrative and financial reforms to introduce privatization to public enterprises under the conservative party led by John Major as the prime minister. The target fields were governmental buildings, airports, hospitals, prisons, and railway. Despite of the governmental change to the Labor Party in 1997, the PFI had developed further as Public Private Partnership (PPP) form.

¹⁴ There is no rule of utilization of project finance technique in the PFI. Despite corporate finance method can be utilized, a majority of PFI is done as project finance transactions.

¹⁵ Structured finance can be divided into asset finance and project finance in a limited sense. Asset finance is techniques based on securities, bonds, and real assets. Tangible examples are collateralized bond obligation (CBO), collateralized loan obligation (CLO), and commercial mortgage backed securities (CMBS).

access to new and cheaper sources of funding, and portfolio management. Investors' interest has been motivated by portfolio diversification and attractive risk-return profiles (BIS, 2005).

Generally, finance is an activity on the credit side of the balance sheet, and the assets are in the debit side of the balance sheet of a company. The key concept of structured finance is that the assets are distilled by the mechanism of financial technology. What defines regular finance is debt financing such as corporate bond and equity financing including capital issues. With regard to corporate finance, structured finance has gained recognition as a popular off-balance-sheet financing technique with a risk diversification strategy these days (figure 3-2).

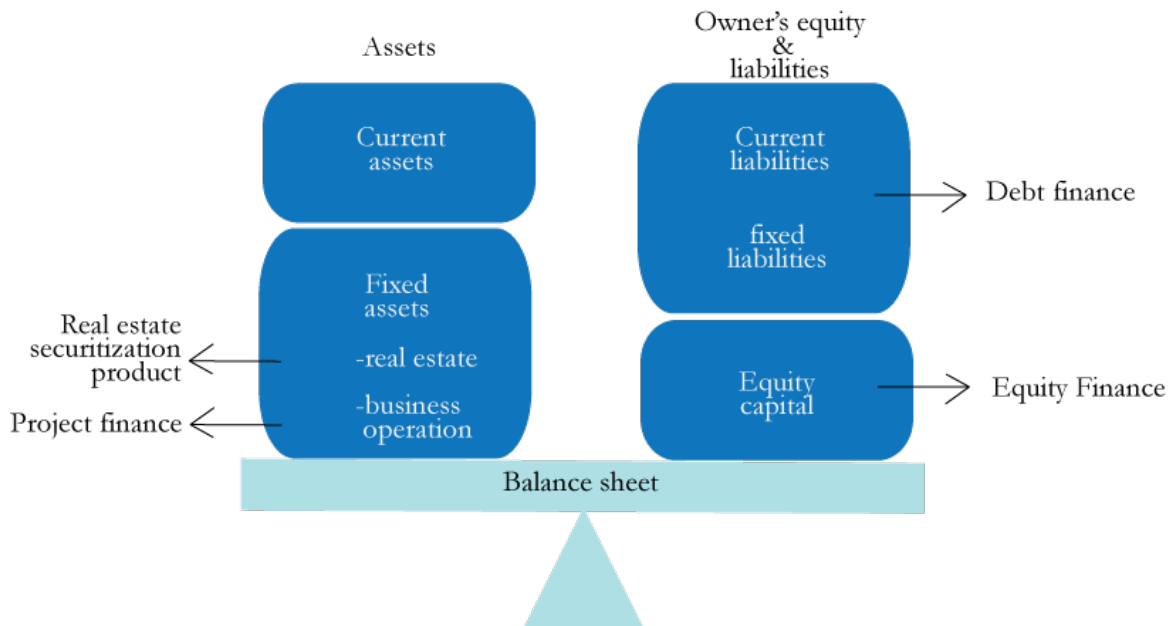


Figure 3-2. Conceptual diagram of structured finance

Source: Adapted from Caselli & Gatti (2005)

3.3.1 Cash Flow

Cash flow consists of cash inflow and cash outflow. As mentioned earlier, cash inflow of project finance is generated by the sale of products made from the project. Construction costs, costs of maintenance, insurance, and operating costs are examples of cash outflow (Yescombe, 2002). Therefore, to carry out the project, financial institutions as lenders screen whether future cash flow is going to be generated as planned or not, and what risk factors may encumber it.

3.3.2 Corporate Finance

Once again, there are two main forms of finance: structured finance and corporate finance. Corporate finance is a financial technique for a company to borrow by raising funds on the basis of business performance, creditworthiness, and properties. Collateral is assets of the parent company, and the source of loan repayment is all types of profits of the entire company. Screening is mainly done by corporate financial analysis and financial forecasts. Then, the financial institution makes credit decisions protecting the collateral; land and buildings owned by the company, composition of the finances, and creditworthiness. In the case of an uncured default, the financial institution compensates for the losses by the foreclosed mortgages (Conley & Williams, 2011).

Table 3-1. Main differences between project finance and corporate finance

	Project finance	Corporate finance
Borrowing entity	Single Purpose Entity (SPE)	Existing company
Collateral for financing	Project assets and its contract agreement	Assets and creditworthiness of the borrower
Effect of financial flexibility	Non-existent or very reduced as regarding the sponsor's flexibility	Reduces the borrower's financial flexibility
Accounting treatment	Off-balance sheet	On-balance sheet
Main variables considered for screening	Future cash flow and business risks	Corporate financial analysis Financial forecast
Sustainable leverage	Depends on cash flow generated by the project	Depends on the effects on the borrower's balance sheet
Source of repayment	Only profit generated from the project	Profit of the whole enterprise

Source: Adapted from Gatti (2003)

3.4 Risks

Risks in the project finance method are as a result of uncertainties, which may incur loss and inconvenience for the business. Project finance is a unique technique weighing heavily on risks. Risk diversification among various participants involved in the project in the early stage hedges against the project encountering significant risks. Thereby, due diligence takes a significant role in the risk identification process legally, technically, environmentally, and financially. (Fight, 2005). To comprehend the business risks, they should be defined precisely based on a proper understanding of the business purpose and identification of all inconvenience points. In this part, risks are divided chronologically into categories: 1) before project completion, 2) after the project completion, and 3) for the entire process.

3.4.1 Type of Risks: Before Project Completion

Participant/credit risks are risks when a sponsor cannot default on their funding liability including managing capitals.

Completion/lag risk: the income and expenditure plan of the project is framed based on the assumption of completion within the planned time frame, within budget parameters, and in line with operation according to planned performance. Any high yield project allows for very little leeway if it does not launch in the first place or does not produce any product expected to be sold. In addition, any delay in completion due to time overruns, such as a delay in securing the site, technical difficulties, failure of the construction contractor's process management, cost overruns, and excess of the initial construction budget, strains the cash flow and can even trigger the worst case scenario: project abandonment.

3.4.2 Type of Risks: After Project Completion

Cash flow risk is the most critical risk in project finance weighing heavily on the importance of cash flow. Since, in principle, a project company is in a SPE form, sale revenue is a critical

aspect of the project's cash flow. Also, unpredictable variable characteristic that depend on market trends can provoke risk.

Market risk is the risk when a product price does not reflect the raw material status in quantity and price. It is necessary ensure procurement methods to obtain the raw material supply long term with stable prices; price fluctuation, in a stable manner to avoid pressured cash flow originating from either unforeseen price increases of raw materials or the unavailability of required amounts.

Resource/reserve risk: in natural resource development projects, the amount of the reserves has a decisive influence on cash flow. Other factors substantially affecting this include the environment of the project area, the quality level of the reserve, and the development cost of the project.

An **operational risk** is essentially recognized as the risk related to the management capacity of the project company; however, other external factors, such as natural disasters and force majeure, are also included regardless of having the ability to produce predefined quality product according to the plan during the operational period or not.

Many environmentally related matters are considered to be operational risks as they cause significant irreversible negative environmental impacts in the air, water, and ecosystem. Natural resource development projects are more likely to face this risk than other types of project finance projects. For instance, delay in the launch of the project can be due to an objection from the local community, a longer process to acquire environmental permits, additional funds to mitigate environmental impacts, and new environmental standards mandated by authorities.

A **sponsor risk** originates in the uncertainty whether the sponsor takes its responsibilities of project implementation and performance or not. Therefore, the sponsor must have both financial and social credibility to accomplish its business purpose.

A **country risk** is an external risk of a host country where the project is located, which means the project company has no control over it. They are usually linked to one or both of the following:

- 1) Political risk including civil war, nationalization, revision of law, and policy change.
- 2) Economic risk including transfer risk (non-repayment of overseas borrowing and trading halts), inflation risk (result in increasing project costs) and foreign exchange risks (a significant decline in the exchange rate).

3.4.3 Type of Risks: Entire Process, Construction to Operation

A **regulatory/approval risk** is a risk where a system supporting project finance from institutional aspects of law and accounting stops working due to immaturity of the systems. Examples are underdeveloped law, underdeveloped tax and accounting systems, and an unclear licensing process.

A project finance transaction has greater potential to include environmentally related risks such as reputational risk from the previous section, credit risk, regulatory risk, operational risk, and legal risk for financial institutions than other structured finance products or corporate finance (Figure 3-3). As illustration of the below:

- 1) a reputational risk is to associate with a project having adverse environmental impacts thereby severely harming a corporate image:
- 2) a credit risk is that inaccurate natural-capital information can produce incorrect fund data to begin the project:
- 3) a regulatory risk is a governmental change in the definition of a restricted area and its access to protection leading to lost privileges to build and operate the project at the site:
- 4) as discussed above, the operational risk is severely connected to environment related problems such as climate change and ecological degradation.; and finally,
- 5) a legal risk is noted as an important risk particularly in project finance transactions where the financial institution takes liable for environmental problems such as ecosystem degradation.

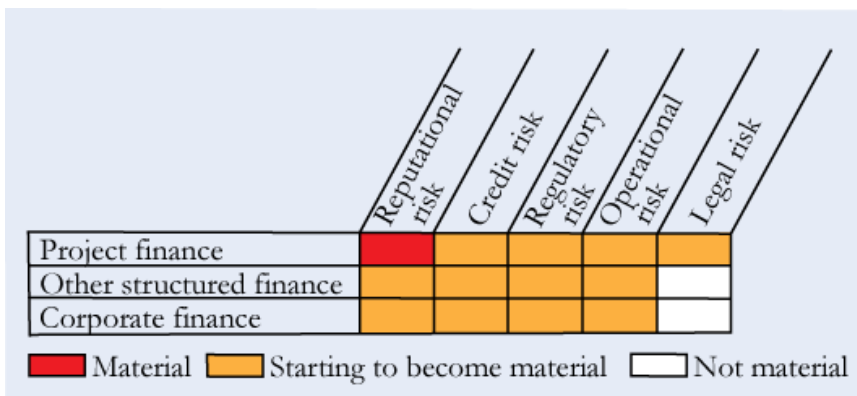


Figure 3-3. Biodiversity related risks among different types of lending businesses

Source: United Nations Environmental Programme Finance Initiative (2010)

3.5 Risk Sharing

What is a fundamental reason to utilize a special financial technique, limited-recourse or non-recourse financing instead of other financial products? The technique not only requires a huge amount of work including preparing the contracts but also significant efforts, cost, and time. In some cases, it needs more than a year to prepare before commencement of providing the loan. As seen from the lender’s perspective, it is generally a high-risk financial product. Hence, to utilize such a technique, it is necessary that the incentives exceed the disadvantages of project finance for both lenders and borrowers.

The ultimate objective of a borrower is to minimize their own risks by subdividing all risks involved in the business. The risks should be shared with suitable parties that have appropriate skills and knowledge. In other words, various risks associated with the project get captured and broken into pieces. Then those who have the best knowledge of the risk and are closely involved in the risk should be in charge (Figure 3-4). For example, the completion/lag risk should be taken by a construction contractor instead of financial institutions or a maintenance company. In general, risk sharing is an effective way when the risks associated with the project are too great to incur by the borrower itself for reasons such as economic issues, environmental impacts, technical issues, and laws. By being in charge of distributing the financial risk among participating financial institutions makes it possible to acquire flexible funding rather than direct finance. Appropriate risk sharing is of the uttermost importance for project finance. In other words, commercialization of project finance becomes impossible at

failure of risk sharing or risk allocation. To make it a more feasible project by appropriate risk sharing is a major feature of the project finance. Risk management to eliminate disincentives becomes more significant in an increasingly uncertain market.

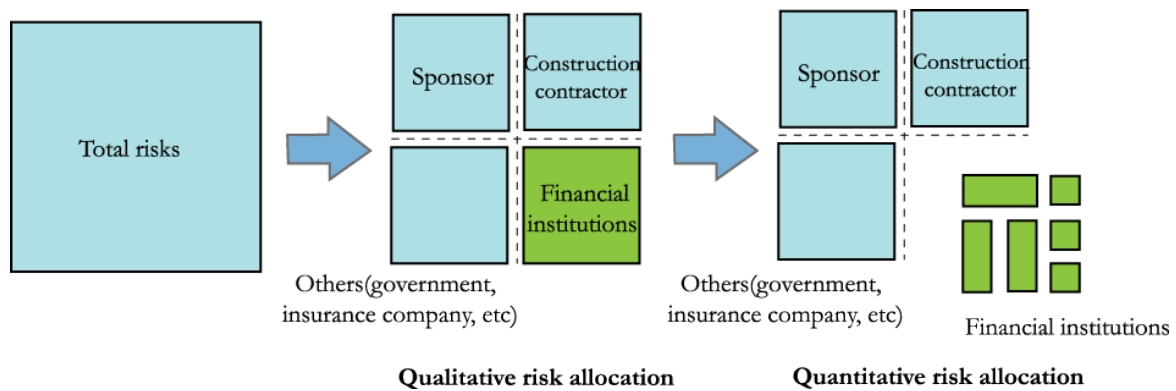


Figure 3-4. Conceptual diagram of risk allocation

Source: Adapted from Yescombe, 2002

4 Voluntary Environmental Programs and Corporate Social Responsibilities

The work of Nobel Prize awarded economist Milton Friedman is often introduced as a position to criticize corporate social responsibility (CSR). According to Friedman (1962, 1970) corporate social responsibility (CSR) expands profits to maximize shareholder value while keeping the basic market rules of the society. It means solving such corporate responsibility issues by running any charity activity, such as self-righteous taxation of stakeholders and distribution to communities by directions from a business manager who isn't chosen by any formal societal procedure, is an undemocratic procedure. On the other hand, R. Edward Freeman suggested in the context of Stakeholder Theory (1984, 1999), a positive social responsibility that claims companies should actively contribute to the society. Despite Friedman's argument that the nature of business is to purely maximize returns to their shareholders, there is a larger amount of corporate engagement in CSR related activities nowadays. Positive corporate behavior is required in response to the changes of the times and business environment. In order to produce sustainable growth, it is required that corporate behavior responds through an analysis of both the internal and external business environments and the building of certain business structures.

CSR is defined as “the continuing commitment by business to behave ethically and contribute to economic development while improving the life quality of the workforce, their families, as well as the local community and society at large” (World Business Council for Sustainable Development, 1999)¹⁶. The two main principles of CSR are 1.) social responsibility: company activity is to be beneficial to society and environmental sustainability; and 2.) the company should not harm the environment by its activity. Management scholar, Archie B. Carroll proposed four different types of CSR (Carroll, 1991) that were Economic Responsibilities, Legal Responsibilities, Ethical Responsibilities, and Philanthropic Responsibilities as CSR pyramid (Figure 4-1). The economic responsibilities are the most important fundamental base at the bottom and has a strong strained relationship with three other responsibilities. Stakeholders are not always interested in all four responsibilities; their concern is different so they have different priorities.

While CSR discusses responsibilities, there is another type of program to create a positive incentive in corporate sustainability matters. It is called a voluntary environmental program (VEP). This is based on the assumption that stakeholders are compensated when a corporation takes ‘beyond compliance’ environmental steps (Prakash & Potoski, 2011). To solve environmental problems, it is important to change to a more sustainable mechanism in all forms of social life including the financial sector, which is seen as a relatively clean industry. The financial sector, in its important role as a mediator to all economic activities, needs to be matched to the sustainable society. Environmentally related issues are considered to be an operational risk for the lending business at banks. Delays in the launching of projects can be caused by objections from the local community, longer processing time to acquire environmental permits, additional funds to mitigate environmental impact, and new environmental standards mandated by authorities. It can cause significant irreversible negative environmental impacts in the air, water, and ecosystem particularly in natural resources development. To manage environmental social governance (ESG) and promote the

¹⁶ WBCSD is a coalition organization of international leading corporations. The executive managers of over 200 corporations in 35 countries play leadership roles regarding environmental and sustainable development by active discussion and policy recommendations.

environmental and social considerations, international initiatives are created by the industry, NGOs and international organizations.



Figure 4-1. CSR pyramid

Source, Carroll (1991)

In this chapter, examples are given of both CSR based programs to carry out responsibilities such as United Nations (UN) Global Compact, UN Principles for Responsible Investment, and Global Reporting Initiative; and VEP based programs to run businesses while creating positive environmental impacts as well as going beyond compliance requirements, including the United Nations Environment Programme (UNEP) Financial Initiative, Investor Network on Climate Change, and Natural Capital Declaration. These programs are appointed subsequent to interviews conducted with personnel with various occupations from a range of institutions: commercial banks, public financial institutions, environmental NGOs. The focus is on international-level programs for a good understanding no matter where the audience of this paper plays its active parts in.

4.1 Corporate Social Responsibility (CSR) Programs

4.1.1 United Nations Global Compact (UNGC)

Former United Nations Secretary-General, Kofi Annan propounded corporate behavior principles for leading global corporate chief executives at the World Economic Forum in Davos in January 1999¹⁷. Then in July 2000, ten worldwide, network-based strategic principles of corporate citizenship through voluntary programs were officially launched in the four areas of human rights, labor, environment, and anti-corruption. Participants contributed to the sustainable development of society by fulfilling their social responsibility while expanding their business development. They integrated the ten principles and utilized the methodology of observation, practice and disclosure of the results of the principles to the extent of their sphere influence. In order for society to advance SD, any actions should need not only involve responsible citizens but also assistance from private corporations and other types of organizations to raise awareness. The participating organizations can aim to bring positive

¹⁷ The four areas are based on the Universal Declaration of Human Rights, ILO Declaration on Fundamental Principles and Rights at Work, Rio Declaration on Environment and Development, and United Nations Convention against Corruption.

change and promote sustainable development by practicing the ten principles in their business activities and communicating with other social actors. Although the initial participants of this program were limited to corporations, many labor unions, NGOs, municipalities, and academic societies support the purposes of the program and have become signatory organizations. As of 2012, over 8700 businesses in 130 countries endorse it, as well as seven UN agencies; the Offices of the High Commissioner for Human Rights (OHCHR), International Labor Organization (ILO), United Nations Environment Programme (UNEP), United Nations Office on Drugs and Crime (UNODC), United Nations Development Programme (UNDP), United Nations Industrial Development Organization (UNIDO), and United Nations Development Fund for Women (UNIFM, part of UN Women), work with this initiative. Out of the ten principles, three of them are related to environmental issues. Financial institutions are able to integrate the principles into their business by communicating with their stakeholders in terms of environmentally sound and responsible business approaches:

Principle 7: businesses should support a precautionary approach to environmental challenges;

Principle 8: undertake initiatives to promote greater environmental responsibility; and

Principle 9: encourage the development and diffusion of environmentally friendly technologies (United Nations Global Compact [UNGC])

To participate and maintain their UN Global Compact membership, they need to fulfill three main requirements: 1) pay annual fees, 2) make progress in corporate responsibility, and 3) issue a publicly available annual communication about the status of the execution of the ten principles to stakeholders.

This communication on progress (COP) may be in the form of an annual report, a sustainability report, or another corporate report including the following criteria:

- 1) announce continuous support of UNGC through an open letter or message by the chief executive officer (CEO) or other executive chairman or president,
- 2) show the previous year's activities in a document in line with the UNGC principles,
- 3) measure achieved results and expected outcomes through a measurement index such as the Global Reporting Initiative (GRI) guidelines:

The GRI guidelines included the following points:

- 1) Reflect positively, disseminate, and integrate the principles into one's business.
- 2) Disseminate positively about being a UNGC participant, respect the principles, and reflect positively into business not only internally for one's own employees but also externally for stakeholders such as customers and suppliers.
- 3) As a signatory organization, contribute to broad development objectives.
- 4) Continue to make efforts toward the achievement of the principles under top management leadership.
- 5) No company is perfect thus it's required to identify problems and strive sincerely. (UNGC)

To maintain the integrity of the program, only companies submitting their COP annually to the UNGC are allowed to continue their participation. A company delinquent in not submitting their annual COP is marked as in "non-communication" on the participant list. In the case of no COP submission for more than a year leads to exclusion from participation.

4.1.2 Global Reporting Initiative (GRI)

In response to aggravated environmental problems in the 1990s, corporations in developed countries began to publish environmental reports as part of environmental countermeasures. Among organizations advocating the environmental reporting initiative, the Global Reporting Initiative (GRI) was formed by the Coalition for Environmentally Responsible Economies (Ceres) for endorsing international guidelines for both corporate sustainability and CSR reporting in 1997. Based in the Netherlands, this international organization was formed by a multi-stakeholder group of corporations, NGOs, labor unions, accountancy bodies, environmental protection groups, and consultants. GRI provides the standard report framework for environmental and CSR reports for corporations to denote progress and performance of environmental and social activities to multi-stakeholders including local communities and customers. The main purpose of the initiative is to provide a world-class, reliable framework for sustainability reporting and to promote a triple bottom line (TBL): environment, society, and economy towards policy development and planning. Environmental aspects of GRI indicators capture raw materials, energy, water and diversity. The target of these guidelines are all organizations regardless of type of organization and industry, scale and area of business as well as past reporting performance history. It includes not only a booklet type of report but also a report on its website¹⁸. A reporting organization can declare how the report is compliant with GRI through Application Levels A, B, and C. In the case of receiving a third-party review, the report is rewarded with an upgraded Application Level denoted with a “+”. The first version of the GRI guidelines was released in 2000 and the latest version is currently 3.1¹⁹. The GRI became a collaborating organization of UNEP in 2002, which makes the GRI the global standard for environmental and CSR reports. Many companies have switched from their original reports to sustainability reports based on the GRI guidelines.

In addition to the collaboration with UNEP, the GRI announced a strategic alliance with UNGC in 2006. The two international voluntary programs in CSR are becoming more cohesive. They implement advocacy activities and other cooperative approaches for all organizations around the world by providing opportunities to adapt comprehensive, systematic, integrated, and universally accepted responsibilities of business strategies. The business organizations utilized the formatted GRI guidelines to comply with environmental and social norms and standards (Cormier, Magnan, & van Velthoven, 2005). The better reports corporations produce, the better their finance performance becomes by indicating the corporation’s stance to all shareholders and stakeholders. Both initiatives encourage support for corporations and related organizations for corporate responsibility with synergetic effort. As a result of the alliance activities, there is a GRI guideline tool for creating progress reports that UNGC participants can utilize. It can indicate how the participants fulfill the UNGC ten principles obligation when reporting the implementation progress.

4.1.3 United Nations Principles for Responsible Investment (UNPRI)

An investor-led international network for working toward solving the ESG issues with responsible investment practices in partnership with UNEP FI and UNGC has been endorsed as an association in 2006 based on an idea by the United Nations Secretary-General at the time, Kofi Annan. The aims of the initiatives are diffusion and growth of the ESG investment. The methodology is to demonstrate the ESG issues in the decision making process for investment to the extent of their pre-existing liability, based on making continuous efforts in ESG investment performance. Sharing best practices and its research resources builds an

¹⁸ GRI guideline may be used in combination with an annual report and a financial report.

¹⁹ Any reporting organization may use either the guidelines 3.0 version or 3.1 version, but GRI recommends the use of 3.1 version.

effective framework for signatory financial institutions: asset owners, investment institutions, pension funds, and financial intermediates. As the principles are non-binding, to consider ESG issues is seen as a social responsibility for institutional investors²⁰. UNPRI signatory financial institutions cooperate and exchange valuable information towards more responsible investments. As of August 2012, the number of financial institutions around the world agreeing to the principles has reached 1099.

The Principles consist of six elements of responsible investment as well as 35 possible actions²¹. Not only do they include the pronouncement of commitments to institutional investors for incorporating the ESG perspective into their decision making process, but also articles to disseminate PRI including disclosing its own information of the signatory institutional investors and requesting to disclose ESG information of entities they invest in.

1. *We will incorporate ESG issues into investment analysis and decision-making processes.*
2. *We will be an active owner and incorporate ESG issues into our ownership policies and practices.*
3. *We will seek appropriate disclosure on ESG issues by the entities in which we invest.*
4. *We will promote acceptance and implementation of the Principles within the investment industry.*
5. *We will work together to enhance our effectiveness in implementing the Principles.*
6. *We will each report on our activities and progress towards implementing the Principles (United Nations Principles for Responsible Investment).*

In this comprehensive statement, the basic premise of PRI is described. There is a possibility that ESG factors can affect investment performance with the acknowledgement of traditional fiduciary responsibility of institutional investors; thus asset management should take the best interest of the assets into account. To run the PRI initiative and other activities, the UNPRI collects annual fees from participating institutional investors. The price is set accordingly by the type of organization and size of the institution. In addition, the UNPRI signatories must deliver their annual report and Assessment Process. The program has no sanctions against a non-compliant member.

4.2 Voluntary Environmental Programs (VEP)

4.2.1 United Nations Environment Programme Finance Initiative (UNEP FI)

The global public-private financial partnership with over 200 financial actors in over 40 different countries pursue, disseminate, and promote the most desirable sustainable development way of business in a variety of financial operations and services for compatible sustainable development of both economic development and environmental protection by information exchange, research, and promotion activity in a coordinated manner. In 1991, UNEP developed a partnership with several commercial banks after UNEP identified no participation for UNEP activity from the financial institutions that have important roles in the sustainable development. The only participants from the private sector had been the industry division. The following year in 1992, the UNEP Statement by Banks on the Environment and

²⁰ There is a possibility that making a social responsible investment decision can be seen as involvement of personal ethics. Unlike individual investors, institutional investors shall practice accountability and not breaching a fiduciary duty. This is why social responsible investment can be treated as troublesome products to handle. Integrating the ESG elements into the investment decision process makes it a more legit reason to invest in.

²¹ Their comprehensive statement shows the basic premise of the PRI. There is a possibility that ESG factors can affect the investment performance with acknowledgement of a traditional fiduciary responsibility for institutional investors: asset management should be taken into account the best interests of asset.

Sustainable Development was launched. The signatories were widespread from commercial banks to investment banks, venture capitalists, asset managers, and multilateral development banks. Three major goals of the initiative have been to: 1) incorporate sustainability mechanisms that produces high profitability within the financial business model, 2) promote private sector investment in sustainability and technology industries, and 3) produce constructive discussion among experts in finance and sustainability.

Since its foundation, in order to achieve these aims, it advocates the internalizing of the ESG externalities into participants' business, organizes an annual meeting for better communication among financial institutions in the world, provides different types and levels of workshops and seminars for dissemination to financial institutions, creates working groups to discuss up-to-date issues, and implements and publishes the results of the research. The members are all institutions and organizations involved in the financial sector such as banks, insurance companies, reinsurance companies, venture capitals, fund managers, regulatory agencies, pension funds, stock index, and financial consultants. The enrollment requirements besides signing on with a Financial Institutions Statement are 1) paying a membership fee²², 2) attending the annual general meeting at least once in two years, 3) participating in UNEP FI activities such as roundtables, initiative groups, and regional meetings, 4) submitting an annual CSR or environmental report, and 5) responding to follow-up surveys on work toward the implementation of its Financial Institutions Statement. The first two items are essential requirements whereas the rest are on a voluntary basis.

4.2.2 Investor Network on Climate Risk (INCR)

INCR was coordinated in 2003 by the Coalition for Environmentally Responsible Economies (Ceres)²³ at the Institutional Investor Summit on Climate Risk at the UN in New York to address sustainability challenges with 10 institutional investors with assets of US\$ 600 billion. Since then, the mission is confined and self-driven "to improve the governance of climate change by using pressure by shareholders"(Ceres, 2010). To achieve their targets, the INCR and signatory institutional investors work closely to increase the awareness of climate change related risk and examine the awareness on the portfolio of the INCR signatories. It is based on fiduciary responsibility that manages risk and seizes the opportunity. Their focus is in the United States specifically as a national level initiative. Although the INCR has been working separately from U.S. federal policies, its success has been in observing actions on climate change issues in the United States. For instance, INCR and its members sent a letter to the U.S. Securities and Exchange Commission (SEC) to appeal for the building of formal guidance for companies to disclose climate-related risks and ensure the current disclosure requirements regarding climate change and other risks²⁴.

As of 2011, the signatory members have increased to over 100 with assets of US\$ 10 trillion. Two member obligations are: fee and commitment, varied by size and type of organizations. Examples of commitments the INCR requested are 1) their new strategies since 2008: deploying a total of US\$ 10 billion in clean technologies among all INCR signatories and 2) a 20 percent reduction over a three-year period of the INCR signatories' coal real estate

²² Membership fees are annual based and calculated based on total assets of a signatory financial institutions as known as "asset under management (AUM)"

²³ Ceres is a leading international NGO based in the United States working with investors and other environmental groups working through environmental issues. Other program besides the INCR are Ceres Coalition, Ceres Companies, Industry, and Business for Innovative Climate and Energy Policy.

²⁴ As a result, the Division of Corporate Finance at SEC made a change in the Rule 14a-8 under the Securities Exchange Act of 1934 in October 2009.

investment portfolios. Despite different sizes of organizational operations and geographical scope, it is a notable initiative because of their leverage to influence carbon disclosure and climate change related issues (Kolk, Levy, & Pinkse, 2008). Obligations to be an INCR signatory: fee and commitment that is varied by the size and type of organization.

4.2.3 Natural Capital Declaration (NCD)

The CEOs of 37 worldwide financial institutions signed on to the Natural Capital Declaration at Rio +20 in June 2012. The aim is for financial institutions to make necessary conditions for contributing to maintain and strengthen natural capital, which are economically, environmentally and socially important assets through collaborative work with government and other organizations. Natural capital is the fundamental essence for all of us to live; however, in the current economic system, it hasn't been properly valued compared to other capitals, namely, social capital and financial capital. Therefore, the NCD defines as natural capital the natural assets on earth: soil, air, water, flora and fauna, the environment that nurtures biodiversity, and its ecosystem -- and recognizes the importance of this natural capital. NCD takes an active role to lead financial institutions to a better sustainable use of this capital. The participating financial institutions agree to take the lead in introducing a new financial framework to the financial sector that takes into account natural capital. They also modify reporting systems to integrate natural capital as generators of both direct and indirect environmental impacts. The NCD recognizes knowledge the acquisition of natural capital and the development of appropriate assessment and risk management tools, that integrate the concept of natural capital in the decision making process of financial products and services such as loans, investments, and insurance policies, as important first steps to be taken by the financial sector. For example, it includes:

- a. *Apply a holistic approach to evaluating bonds and equities through the integration of Natural Capital considerations in ESG risk analysis in short, medium and long-term growth forecasts of investee companies;*
- b. *Systematically consider and value Natural Capital in the credit policies of specific sectors, including commodities, that may have a major impact on Natural Capital either directly or through the supply chain (Natural Capital Declaration, 2012).*

Because of the early stage of the program, there is no activity report, but one of the plans is for the NCD body to create working groups. While a majority of VEPs are only subject to a specific business area of the whole financial industry, the NCD covers almost all financial businesses; loans, investment, and insurance playing a complementary role to other existing programs and frameworks. Non-financial institutions participate as supporters in the program. Currently 23 organizations including some environmental NGOs support it. The only participation requirement for financial institutions to the NCD is relatively easy: submitting a CEO commitment statement. As the NCD takes a complementary position to other existing programs and frameworks, it doesn't impose any reporting requirement to signatory institutions while these other programs request certain reports and disclosure.

5 The Equator Principles

The Equator Principles (EPs) is another example of a VEP in the financial industry with a common voluntary credit risk management framework. It pertains to VEPs with over US\$ 10 million in the lending business of project finance transactions for assessing environmental and social impacts and managing environmental and social risks. Equator Principles Financial Institutions (EPFIs) that participate in the program, incorporate approaches of the environmental and social policy frameworks into their project finance lending business. Despite differences in utilization methodology, there is still consistency in that all principles should be integrated into their project finance business (Hunter, 2008).

Equator Principles consists of 10 principles components:

Principle 1: Review and Categorization

Principle 2: Social and Environmental Assessment

Principle 3: Applicable Social and Environmental Standards

Principle 4: Action Plan and Management System

Principle 5: Consultation and Disclosure

Principle 6: Grievance Mechanism

Principle 7: Independent Review

Principle 8: Covenants

Principle 9: Independent Monitoring and Reporting

Principle 10: EPFI Reporting (Equator Principles [EPs], 2006)

The EPs framework shares its principles with the International Financial Corporations (IFC) sustainability framework in that both include the following: 1) an environmental risk categorization principle, 2) a social and environmental assessment principle, 3) a principle of law and legislation compliance, and 4) a principle of environmental management plan (EMP) including monitoring and reporting.

5.1 History of the Equator Principles

5.1.1 Pre-2003 and World Bank Group Safeguard Policies

EPs were introduced as the first voluntary and international code of guidelines and principles for environmental credit risk management in the project finance business of commercial financial institutions, and developed in stages from there. Ten commercial banks²⁵ representing approximately three quarters of the global project finance market at the time (Smith, 2006) announced the adaptation of the EPs on June 4th, 2003 in Washington, D.C. after a number of banks came under public scrutiny due to involvement in projects that damage the ecosystem. Campaigns led by civil society and NGOs requested spurned financial institutions to mitigate the environmental and social impacts. For instance, in the late 1990s, ABN Amro (a Dutch financial institution) was the target of a campaign introduced by an environmental NGO (Friends of the Earth) regarding financing of a mining project in Papua New Guinea that severely contaminated local water supplies. ABN Amro realized that there were no established principles for any private bank to guide them in lending decisions with social and environmental risks. An action ABN Amro took with other commercial banks: Citigroup, Barclays, and WestLB, was to seek advice and plans to manage the environmental

²⁵ Ten commercial banks in seven countries; ABN AMRO Bank (Netherlands), N.V., (Netherlands), Barclays plc (U.K.), Citigroup Inc. (the U.S.), Credit Lyonnais (France) (it was acquired by Credit Agricole.), Credit Suisse First Boston (Switzerland)(it was merged into a division of Credit Suisse), HBV Group (Germany)(it was taken over by UniCredit Group), Rabobank Group (Netherlands), the Royal Bank of Scotland (U.K.), WestLB(Germany), and Westpac Banking Corporation (Australia).

and social risks from the International Finance Corporation (IFC) ²⁶. IFC is a private sector arm of the World Bank Group (WBG) to provide loans to private sector business in developing countries. This led to the establishment of the EPs among the four banks with IFC in 2003. The assistance from IFC led to the adaptation of the then-existing IFC environmental and social Safeguard Policies as its model for environmental and social standard policies. In 1998, the IFC as part of the divisions of WBG had adopted World Bank (WB) Safeguard Policies to minimize and mitigate the environmental and social risks of their supporting projects. Those clients who received IFC's support were requested to comply with environmental and social considerations along with the Safeguard Policies.

IFC environmental and social Safeguard Policies Safeguard Policies (until 2006):

OP/BP 4.01: Environmental Assessment

OP/BP 4.04: Natural Habitats

OP/BP 4.36: Forests

OP 4.09: Pest Management

OP/BP 4.11: Physical Cultural Resources

OP/BP 4.12: Involuntary Settlement

OP/BP 4.10: Indigenous Peoples

OP/BP 4.37: Safety of Dams

OP/BP 7.50: International Waterways

OP/BP 7.60: Disputed Areas (World Bank, 2012)

5.1.2 Equator Principles I (EP I)

The first EPs (EP I) involved new project finance transactions with over US\$ 50 million as a total investment. It was based on WB Safeguard Policies. EPFIs were expected to develop their own internal policies and procedures consistent with the EPs. EP I established that a borrower must conduct an environmental assessment.

5.1.3 IFC Performance Standards

EP I was revised quickly after IFC adapted new environmental and social Performance Standards as a part of the new IFC Sustainability Framework in February 2006. The revision, EP II, came into effect in April 2006. The IFC Safeguard Policies were modified to correspond to private sector business based on the World Bank's environmental related guidelines. Under the new IFC Policy on Social and Environmental Sustainability Framework, the Safeguard Policies of ten different conventional themes had been revised to eight Performance Standards. The new and revised Performance Standards intended to ascertain major impacts on environmental and social considerations as it applied *mutatis mutandis* to the environmental and social standards of private financial institutions. In conjunction with the Performance Standards, the disclosure policy and Environmental, Health, and Safety Guidelines (EHS Guidelines) were revised.

IFC Performance Standards on Environmental and Social Sustainability:

Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts

Performance Standard 2: Labor and Working Conditions

²⁶ IFC lending can be critical for leveraging additional private sector capital to projects in developing countries. They are independent organizations within the World Bank Group, but all organization of the World Bank Group share essentially the identical Board of Executive Directors. In addition, the President of the World Bank chairs each of the World bank Group organizations (Hunter, 20008).

Performance Standard 3: Resource Efficiency and Pollution Prevention

Performance Standard 4: Community Health, Safety, and Security

Performance Standard 5: Land Acquisition and Involuntary Resettlement

Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

Performance Standard 7: Indigenous Peoples

Performance Standard 8: Cultural Heritage (International Finance Corporations[IFC], 2006)

5.1.4 Equator Principles II (EP II)

In response to the IFC Performance Standards, the EP had revised their standards, too. Parallel to the public consultation process period of the IFC Performance Standards, EPFIs worked with varieties of stakeholders: NGOs, civil society, clients, export credit agencies, and industry associations, for mutual consultation. The effort was shown as a revision of the EPs (EP II) in July 2006. In addition to the adaptation of the IFC Performance Standards, the World Bank Group (WBG) EHS Guidelines were applied.

EP II modified applicable criteria to: 1) drop the total investment criteria from US 50 million to over US \$ 10 million; 2) include as target projects all refinancing, primary existing or additional existing projects, as well as advisory operations when a business operator wishes to apply for the loans; 3) request independent consultation, monitoring, reporting, and a complaint handling mechanism based on IFC Performance Standards and categorization according to IFC Social and Environmental screening criteria; 4) change to both a social and environmental assessment from just an environmental assessment; 5) monitor projects based on the IFC Social and Environmental screening criteria-- monitoring has become a part of mandates from a status of “as necessary” on EP I. There is no choice but to monitor for all Category A projects; 6) widen the scope to cover an independent review in the form of an independent expert who must carry out the review during the process, and last; 7) integrate a consultation process has integrated into the overall process and principles. (Clayton, 2009; Lawrence, 2009)

5.1.5 New IFC Performance Standards and EP III

The IFC Performance Standards of the IFC were revised in January 2012. The EP Association is paying attention to this revision, particularly with regard to biodiversity, climate change, and social risk as reflected in the new version of the EPs (EP III). Currently, EP III is preparing to change or add more scope to the EPs, establish better reporting and transparency mechanisms, and address membership and governance issues. As of early 2012, 76 financial institutions are the EPs signatories as EPFIs.

5.2 Components of the Equator Principles

5.2.1 Environmental Risk Categorization Principles

Principle 1: Review and Categorization, as a project identification stage, is the centerpiece provision for due diligence. As such, EPFIs review and categorize the consideration of new and expanding, existing projects according to environmental screening categories of A (high environmental or low risk), B (medium environmental or social risk), or C (low environmental or social risk) based on the IFC’s environmental and social screening criteria. Criteria include the type and scale of the project, its location, sensitivity of the environment, characteristics of the community, and magnitude of potential environmental impacts (Wright & Rwabizambuga, 2006; Conley & Williams, 2011).

Category A is likely to have potential negative, adverse, environmental or social impacts that are sensitive, irreversible diverse, or unprecedented. These impacts may affect an area broader than just the site or facility. It is also subject to physical works as well as severe impacts caused by multiple factors (Wright & Rwabizambuga, 2006; Clayton, 2009).

Category B - unlike Category A, the potential environmental and social impacts are limited to the site or facility specifically, and the impacts are less adverse than in Category A. Mitigation plans for this category can be easier than the Category A's mitigation schemes. There are only a few environmental aspects compared to the Category A project with multiple factors. These effects are manageable by technical mitigation measurement (Wright & Rwabizambuga, 2006; Clayton, 2009).

Category C has minimal or no harmful potential environmental or social impact. In other words, a project under this category only has marginal outcome of actions and no negative impact (Wright & Rwabizambuga, 2006).

5.2.2 Social and Environmental Assessment Principle

Principle 2: the social and environmental assessment principle is “a process to determine the social and environmental impacts and risks of a proposed project in its area of influence” (EPs, 2006). Though the Category C project has no mandatory action regarding a social and environmental assessment, borrowers of Category A and Category B projects execute the assessment as Principle 2 describes to address the environmental and related social problems identified in the early environmental risk categorization process (Clayton, 2009). The borrowers or third party experts prepare the assessment to be submitted to EPFIs. The contents of the assessment can be varied by scale and the nature of each project. The assessment may contain a full-scale social and environmental impact assessment, or a limited or focused environmental or social assessment. It can be one or a series of special studies including pollution standards, design criteria, and/or construction standards. However, all assessments should include mitigation proposals and management plans to minimize the impacts and risks of the proposed projects (Clayton, 2009; EP II Preambles, 2006).

5.2.3 Principle of Law and Legislation Compliance

Besides the assessment conducted by the borrower, other characteristics of the assessment are to demonstrate compliance with the applicable project's host country laws, regulations, and permits; and to follow industry-specific standards and World Bank Group EHS Guidelines as Principle 3: Applicable Social and Environmental Standards (Wright & Rwabizambuga, 2006).

All Category A projects and Category B projects in non-OECD countries or countries are classified as non-high income OECD countries (see Appendix B for listed those countries), must prepare environmental Action Plans (AP) that address the implementation of environmental and social impact mitigation measures, corrective actions, and monitoring measures as Principle 4: Action Plan and Management System. Also, these projects must conduct free, prior, and public informed consultations for affected groups and communities as Principle 5: Consultation and Disclosure²⁷. The consultation must be done in a “structured and culturally appropriate manner” (EPs, 2006), and its process should be led by the borrowers with publicly disclosed information to “facilitate informed participation” (EPs, 2006) of the affected people. Lastly, borrowers establish a Grievance Mechanism as Principle 6. This action should be continued throughout the operation period of the project to make it

²⁷ For the Category B project, the consultation is seen “as appropriate” to be carried out.

possible for people in the affected area to state their grievances. The raised issues should be treated in a “culturally appropriate manner” (EPs, 2006).

The AP will be covenanted as Principle 8: Covenants. Both the EPFIs and the borrower ensure compliance (Hunter, 2008; Clayton, 2009). An independent review in accordance with Principle 7: Independent Review, should be conducted by an external expert who specializes in social and environmental assessment, AP, and the consultation process.

5.2.4 Principle of Environmental Management Including Monitoring and Reporting

As a part of the AP and Principle 9: Independent Monitoring and Reporting, an independent environmental and/or social expert conducts ongoing independent monitoring throughout the loan period and prepares reports to be shared with EPFIs. It applies to the same extent as Principle of law and legislation compliance: all Category A projects and some Category B projects (Clayton, 2009).

5.3 The Equator Principles Association

Equator Principles signatory banks adopted provisions and an organizational management structure that became the Equator Principles Association in July 2010. The association does not have its own office or staff for its organizational operation, and is an international organization led by the EPs signatory banks which assist the association operation with their human resources. Currently the association consists of five agencies including its chairman, steering committee, working groups, secretariat, and treasurers.

A **bank chairman** represents as both chair of the EPs as well as chair of the Steering Committee, and plays a coordinating role with other signatory banks, EPs working groups, and the Steering Committee.

The **Steering Committee** makes decisions on all EPs-related matters except matters of the greatest importance such as a major revision of operating rules and the EPs body text in the organizational decision-making process. As of August 2012, the Steering Committee is consisted of 14 banks: Barclays plc, Credit Agricole Corporate & Investment Bank, Credit Suisse, Citigroup, Export Development Canada HSBC, ING (Steering Committee Chair), Itau Unibanco S/A, Mizuho, Standard Bank Group, Bank of Tokyo Mitsubishi UFJ (BTMU), The Royal Bank of Scotland, and UniCredit Bank AG.

Working groups are established by the Steering Committee to work on raised issues by EPFIs and to promote best practices. The Steering Committee members serve as the head of each group and other members are recruited widely from all EPs signatory banks. Currently different types of working groups are put into places covering communications, outreach, stakeholder engagement, biodiversity, climate change, and social risks.

A **secretariat** is in charge of the operation of the EPs official website, setting up meetings, and preparing recodes of the meetings. (Outsourcing to British non-profit organization, Work Ethics).

A **treasurer** manages the fee. EPFIs introduced the annual fee system in 2008. All EPs signatory banks split the expenses evenly. The treasury manages the fees.

5.4 Equator Principles Membership

There is no prerequisite to be an EPFI as a financial institution except for completing the agreement of announcement of the EP adaptation and adding a link of EPs on the institution's website. Requirements for EPFIs are to 1) continue to work with EPs in project finance, 2) report publicly available document at least annually regarding EPs implementation based on Principle 10: EPFI Reporting and the number of transactions screened by the EPFI and its categorization. Breakdowns of region and sector are optional. The reports are publicly available at EPs Association website. And, 3) pay the annual fee in time. Currently the fee is GBP£ 3100. There is no significant official sanction for EPFIs regarding non-compliance besides two minor ones. Any EPFI can be de-listed if one fails to make a payment or submit the EPFI annual report.

6 Analyses

The Equator Principles as a voluntary environmental program sets out an overall framework for banks to review and mitigate environmental and social impacts and risks in their project finance transactions.

6.1 Different Responsibilities between borrowers and lenders

As mentioned in the previous chapter, EPFIs make progress and determine their project finance transactions using the EPs framework. The process includes not only the EPFIs efforts alone. Co-operative actions of borrowers are necessary. This section divides the principles into actions taken by both EPFIs and their borrowers.

6.1.1 Responsibilities of EPFIs

Principle 1- Review and Categorization: a bank categorizes both new and expanded projects for reviews according to IFC environmental and social screening criteria. It “considers in an integrated manner the potential social and environmental (including labor, health, and safety) risks and impacts of the project” (IFC, 2006). Examples of the criteria are the type of project location, sensitivity of the environment, and characteristics of the community. The categorization is seen as a significant step forward for the entire process. This is because followed by the categorization result, distinct actions must be taken for each Category A, B, and C project.

Principle 3- Applicable Social and Environmental Standards: the bank makes an assessment evaluation referring to the IFC Performance Standards, World Bank Group EHS Guidelines, and the national laws of the host country.

Principle 7- Independent Review: banks should engage an independent expert in social and environmental management for independent reviews. This is not only for a social and environmental assessment document but also includes an action plan, consultation process, and grievance mechanism for supporting the banks’ due diligence and EPs compliance.

Principle 8- Covenant: the banks shall encourage their borrowers to comply with the EPs terms and conditions for contracts when creating financing agreements. The loan documents include specific covenants to comply with the action plan the borrowers have established as well as to submit periodic reports attesting to their compliance with the structured action plans. It also includes actions in the case of a breach in the covenants. The bank shall agree to work together with the borrower to bring the circumstance back to compliance status. In the worse case that the borrower continues to breach, the bank may exercise its rights including declaring the borrower in default and asking for immediate repayment.

Principle 10- EPFI Reporting: EPFIs shall report annually to the EPs Association regarding their EPs implementation process and plans. Two minimum content requirements are 1) the number of transactions subject to EPs and 2) their EPs implementation process and information.

6.1.2 Responsibilities of EPFIs’ borrowers

Principle 2- Social and Environmental Assessment: a borrower prepares the social and environmental assessment after an EPFI’s categorization finds the project either as Category A (high-risk) or Category B (limited-risk). Additionally, the borrower shall identify measurements to mitigate and manage the identified environmental and social impacts and risks.

- Principle 3- Applicable Social and Environmental Standards: for the identified environmental and social impacts and risks, the borrower fulfills all the social and environmental standards: IFC Performance Standards, WB Group EHS Guidelines, and national laws and regulations of the host country.
- Principle 4- Action Plan and Management System: the borrower develops an action plan and environmental management system according to the results of the categorization and the social and environmental assessment. They may include mitigation measures and provisions, a management plan, and an alternative plan to comply with the identified social and environmental risks.
- Principle 5- Consultation and Disclosure: the borrower or a specialized third party on behalf of the borrower provides free informed consultations in advance in a “structured and culturally appropriate manner” (EPs, 2006). In order to enhance the consultation, the borrower provides appropriate information, which is written in the local language, beforehand to the local community. It is an important step for everyone--local people, the borrower, and the bank--to promote discussions among all people involved in the project and the community about all aspects of the project.
- Principle 6- Grievance Mechanism: concerns and grievances of the people in the affected area should be documented, and the borrower works through them transparently and expeditiously. Also, they shall give an explanation for the grievance mechanism to the affected community in “a culturally appropriate manner”(EPs, 2006) and ensure their continuing engagement not only during the construction period but also throughout of the operation phase of the project.
- Principle 9- Independent Monitoring and Reporting: the borrower delegates an independent monitoring of the project to a third party expert throughout the construction and operation periods, and reports the results to the bank periodically.

6.2 Equator Principles Financial Institutions (EPFIs)

As of September 2012, there are 76 EPFIs. Out of all the participating banks, 42 percent are European banks mainly locate in Western Europe, 18 percent are North American banks, and 15 percent are African banks in 2012 (Figure 6-1). An increase in the appearance of diverse members is seen year after year. In 2004 EPFIs were only from 13 countries but in 2012 they were from 32 different countries. It is remarkable to view how African members have increased over the years. Until 2009, the only African member was a South African bank, but currently there are 11 African banks. A fascinating fact is that unlike Asian members, they are more spread out around Africa in South Africa, Egypt, Nigeria, Morocco, Togo, and Mauritius. The 5 percent of Asian banks only consist of one Chinese bank and three Japanese banks. No Asian bank has joined since 2008 after the enrollment of the Chinese bank. In other words, no South Asian bank or any Southeast Asian bank has joined the EPs yet.

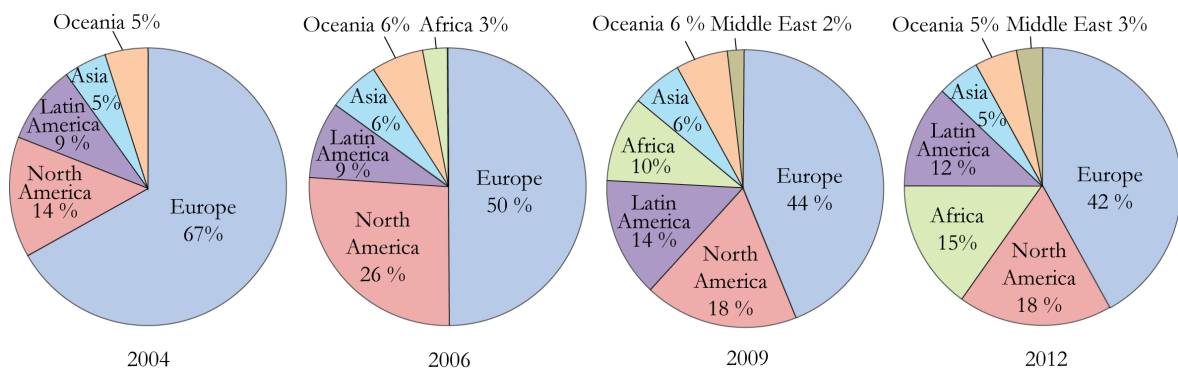


Figure 6-1. EPFIs regional distributions

Source: Equator Principles Association (2012)

Enrollment as a whole has seen slower growth. Indeed, the year of the EPs establishment, 2003, had the most numbers of new participants (Figure 6-2). Also, there is no consistent pattern in the enrollment. For example, there were consistent interests by European banks to becoming members every year until 2011; however, so far, there are no new EPFIs from Europe in 2012. Also, all new members in 2011 were located in high-income countries: Germany, Spain, the United States, and Bahrain. And in addition, in contrast to the case in 2011, new participants in 2012 are in neither high-income OECD member countries nor high-income non-OECD member countries. They are located in Mexico, Togo, Mauritius, and Nigeria.

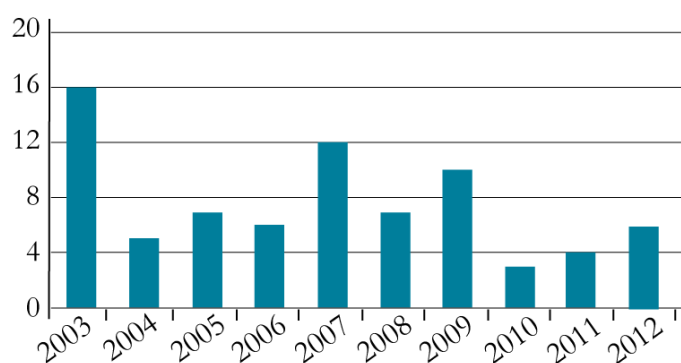


Figure 6-2. New EPFI participants per year

Source: Equator Principles Association (2012)

The EPs are becoming a more diverse association; however, the European banks are still in the majority after nine years since its establishment. Wright and Rwabizambuga (2006) point out that the pattern of uneven distribution is seen in other international VEPs, particularly concentrations of European participants. In the cases of UNEP FI, 72 percent are European financial institutions. For the GRI, 48 percent are European participants. Lastly, European signatories are 46 percent in UN Global Compact.

6.3 Comparisons Among MDBs, ECAs, and EPFIs

Since the late 1980s, multilateral developmental banks (MDBs) such as the WB, Asian Development Bank (ADB), and the European Bank for Reconstruction and Development (EBRD), have shifted from a traditional, capital-emphasized concept to a new one. There is a strengthened environmental mitigation strategy to minimize indirect environmental impacts. This is to be achieved by deploying environmental and social reviews when determining loans and confirming environmentally related documents. These documents include an environmental impact assessment done by their borrowers, consultation with local communities, and the disclosure of environmental and social related documents (Hunter, 2008). It seems that this development has spread to export credit agencies (ECAs) and private financial institutions in OECD member countries. ECAs are public institutions to promote international trade through investments, loans, guarantees and insurance. Currently, four ECAs are also members of the EPs Association: the Export-Import Bank of the United States (Ex-Im Bank), Export Development Canada (EDC), Denmark's Eksport Kredit Fonden (EKF), and Australia's Export Finance and Investment Corp (EFIC). Environmental and social standards now exist virtually for all international sources of project finance capital: MDBs, International Finance Corporation (IFC), ECAs, and private commercial banks.

6.3.1 OECD Common Approaches

When discussing environmental policies at ECAs, an Organization for Economic Co-operation and Development (OECD) recommendation cannot be left out. In December 2003, OECD announced Common Approaches on Environment and Officially Supported Export Credits as an OECD recommendation (OECD Common Approaches) regarding environmental impacts on ECAs supported projects. It allows ECAs to identify environmental impacts, conduct environmental impact assessments, and evaluate them. This recommendation clarifies that the World Bank Safeguard Policies meets international standards for benchmarking environmental and social considerations (Marco, 2011). The revised version, Revised Council Recommendation on Common Approaches on the Environment and Officially Supported Export Credit, was adopted in June 2007 after over a year of discussion. The revised edition incorporates strengthened disclosure and benchmarking into international standards. It integrates environmental international standards among ECAs.

The establishment of IFC Performance Standards in April 2006 changed the previously established environmental international standards. For appropriate large-scale project finance projects, ECAs apply the IFC Performance Standards. Each ECA leverages the Performance Standards as their environmental and social criteria reference when financing in the private sector in order to assess environmental and social risks. In the meantime, the ECAs still refer to the OECD Common Approaches. The particular ECAs, which are also EPFIs, weigh the IFC Performance Standards more than the OECD Common Approaches because of the similarities between the EPs and the Performance Standards compared to the stand-alone OECD Common Approaches. IFC Performance Standards is more of a normative framework than the OECD Common Approaches and EPs (Hunter, 2008). Having said that, all of them have the same outcome in one way or another. To compensate for the lack of a normative approach, the OECD Common Approaches request projects to be benchmarked. On the other hand, the EPs require the incorporation of the framework by referencing.

6.3.2 Export-Import Bank of United States (Ex-Im Bank)

Ex-Im bank is the United States' official ECA and an EPFI²⁸. The bank established its internal procedure guideline, Environmental Procedures and Guidelines, in 1995 and revised it to deal with the OECD Common Approaches in 2004. Applicable criteria relate to all projects over US\$ 10 million or projects with over a two-year redemption period. In addition to the EPs standard category groups of Category A, Category B, and Category C, their categorization includes Category N which relates to all projects involving nuclear matters. This category conforms to the Ex-Im Bank Nuclear Procedures and Guidelines. Each category is well defined. Their Category B is stricter than EPs Category B description that relates to renewal or extension projects that have only limited environmental impacts. The requirement for Category A projects is submission of environmental impact assessment. Category B projects must further confirm compliance with host countries' environmental laws and standards as well as appropriate international standards.

As a part of their monitoring and evaluation plans, the Ex-Im bank monitors all Category A projects particularly on environmental performance throughout the bank's assistance period according to Section 5 of the Environmental Procedures and Guidelines that refers to monitoring and evaluation. The Export-Import Bank Reauthorization Act of 2006 makes

²⁸ The establishment was in 1934 and being member of EPs since 2011.

disclosure compulsory at the bank. It includes the documentation of environmental impact assessments, action plans, mitigation procedures, and monitoring reports.

6.3.3 Eksport Kredit Fonden (EKF)

EKF is also an EPFI as an official Danish ECA²⁹. They don't assist any project without a recommendation by an external environmental consultant who investigates based on the EKF guidelines and international standards of the OECD Common Approaches, and the EPs in the case of project finance proposals. Their categorization and its contents are very similar to EPs, except with regard to requirements. For instance, EKF discloses the environmental impact assessment information of Category A projects prior to final commitment. Also, Category A projects must carry out site surveys done by environmental specialists. EKF has monitored project finance projects according to EPs framework since their EPs affiliation in 2004. For the rest of the projects, monitoring is done as the basis for environmental assessment recommendations. For some Category B projects, ISO 14001, environmental management standards to identify and control environmental impacts (Brorson & Larsson, 2011), are utilized in their process.

EKF takes the position that adopting and integrating the EPs in their lending business is very beneficial to all stakeholders including the EKF itself and its customers. Following the principles has led the EKF to be involved in the initial stage of the environmental review process and to understand reasons to achieve environmental protection. Also, through the EPs, EKF imposes contractual provisions on environmental and social terms that enable EKF to monitor the process. Other potential benefits of leveraging the EPs may include increased transparency and credibility as well as less suspicion of governmental intervention in the projects. This is probably why the new application of the screening process is done by underwriting personnel, possibly with both internal and external environmental experts. Information related to an environmental review is entrusted to external environmental consultants.

6.4 Applying Theories to Understand EPs Better

To support all findings above, two theories are discussed: Club Theory (Potoski & Prakash, 2008) and Institutional Isomorphism (DiMaggio & Powell, 1983). The Club Theory identifies four attributes of EPs as a voluntary environmental program in social externalities, shrinking, branding benefit, and costs. Institutional Isomorphism leads to finding reasons why financial institutions are interested in joining the EPs.

6.4.1 Club Theory

EPs and three VEPs discussed in Chapter Four: United Nations Environment Programme Finance Initiative (UNEP FI), Investor Network on Climate Risk (INCR), and Natural Capital Declaration (NCD), can be classified into different types of environmental voluntary clubs by program designs and the effectiveness of the VEPs to induce positive social externalities in the Club Theory. The theory addresses key attributes of voluntary programs and two prominent characteristics of effective voluntary clubs.

Key Attributes of Voluntary Clubs

The first attribute, **sponsorship**, determines the ownership of a voluntary program. The sponsor is in charge of organizing the VEP by establishing rules and applying them. Potoski & Prakash (2002) address three categories of voluntary clubs sponsors: governments, non-

²⁹ It was established in 1992 as the third oldest agency. EKF is the first EPFI as an ECA to join in 2004.

governmental organizations (NGOs), and industry associations. The significance of various sponsors appear as the legitimacy of the voluntary clubs that result in incentives of enrollment for prospecting participants.

EPs - sponsored by an industry association

UNEP FI - sponsored by an international governmental organization

INCR – sponsored by a non-profit organization

NCD – sponsored by an international governmental organization

For a uniform analysis further on, only one of two voluntary clubs coordinated by governmental organizations is selected: UNEP FI.

The second attribute, **eligibility**, indicates financial institutions as prospecting participants potentially being interested in and joining in the program by criteria. VEPs in the financial industry are varied in the intended activity. EPs focus on financial institutions that deal with project finance transactions in the lending business, and the subject of INCR is institutional investors whereas UNEP FI covers all activities in the financial institutions.

Thirdly, **program requirements** are essential for all VEPs to continue to exist as voluntary clubs – “the costs of retaining membership to the club” (Potoski & Prakash, 2002) for participants. The program requirements include prerequisites to join and conditions to retain in the programs (Table 6-1 for cases in the three VEPs). To operate voluntary clubs, appropriate level and amount of requirements are necessary. In the case of too burdensome requirements, they recede prospecting participants. For institutions that are willing to enroll, the costs of requirements are significant subjects to make their decisions.

Table 6-1. Program requirements

	To join	To retain
Equator Principles	Signing the EPs Association adaptation agreement	1) Submitting an annual publicly available report regarding the EPs implementation 2) Paying an annual membership fee
UN Environment Programme Finance Initiative	Signing the UNEP FI statement and complete a membership form	1) Showing commitment that participants sign on the UNEP FI statement 2) Being proactive in UNEP FI network and activities 3) Submitting a sustainability report annually 4) Paying an annual membership fee
Investor Network on Climate Risk	Getting approvals by Ceres Board of Directors	1) Engaging in INCR’s meetings and working groups 2) Sharing best practice and lessons learned 3) Paying an annual membership fee

The fourth attribution is **incentives** for joining a VEP. Participants acquire both non-monetary and monetary benefits in return for their enrollments. The types of benefits are:

- 1) social externalities that constitute the policy payoff of voluntary clubs,
- 2) private benefits that accrue to a single member firm only,

- 3) club goods that accrue to club members only and are the central motivation for members to join the club (Prakash & Potoski, 2007).

Among the three kinds of voluntary programs, clubs sponsored by governments can provide more tangible benefits including meeting regulations, permitting procedures, and technical assistance. Clubs promoted by NGOs offer fewer incentives but give reputational and goodwill benefits. It is more complex to produce both tangible and intangible incentives by industry-sponsored programs (Potoski & Prakash, 2002).

Finally, **sanctions** are imposed for non-compliance members. Compared to mandated goals, the nature of voluntary programs limit the sanction options; members do not identify the sanctions as primary reasons to enroll in VEPs as they are not interested in being punished. Although UNEP FI and INCR do not impose any sanction, EPs introduce minor sanctions: to be de-listed from EPs participant list if one fails to pay an annual membership fee or submit an annual report.

Table 6-2. Key attributes of voluntary environmental programs in the financial sector

	1) Sponsor	2) Eligibility	3) Program requirements	4) Incentives	5) Sanctions
Equator Principles	Industry association	Financial institutions with project finance business	-1 requirement to join -4 requirements to retain	Yes	Yes
UN Environment Programme Finance Initiative	International governmental organization	All financial institutions	-1 requirement to join -3 requirements to retain	Yes	No
Investor Network on Climate Risk	Non-profit organization	Institutional investors	-1 requirement to join -2 requirement to retain	Yes	No

Effective Clubs or Institutional Designs

An effective voluntary program has two prominent characteristics: strong attractiveness to participants and a solid system to cohere its participants under program obligations (Potoski & Prakash, 2007). These two characteristics are identified as necessary to remain as voluntary programs instead of governmental regulations such as cap-and-trade tax and command-and-control regulation.

Sword, which consists of monitoring and enforcement mechanisms to comply with clubs' code of behavior, is a vital element of a voluntary club (Potoski & Prakash, 2007). A **strong sword club** has three components: an auditing system, a disclosure system, and a sanction mechanism. Having these elements keeps the program away from an issue called shirking. A membership fee is usually involved in this type of club. A **medium sword club** demands mainly two aspects: third party auditing and public disclosure of the auditing result. There is no sanction mechanism, but external stakeholders may punish participants indirectly with the disclosed information on behalf of the society and programs. The only requirement for a

weak sword clubs is third-party auditing. A **no sword club** has none of the components (Table 6-3).

Table 6-3. Institutional design assessment of voluntary programs

	Institutional design			Program type
	Third-party audits	Public disclosure of audit information	Sanctioning	
Equator Principles	No	No	Slightly yes	Weak sword
UN Environment Programme Finance Initiative	No	No	No	No sword
Investor Network on Climate Risk	No	No	No	No sword

Source: Potoski & Prakash (2006)

Prakash & Potoski (2007) classify club standards into two types. While a voluntary club with **lenient standards** requires participants to produce little social externality, a voluntary program with **stringent standards** demands high-level positive social externalities from its members. This paper assesses the three VEPs' standards by club benefits, which are described on their publicly available documents and are aimed to produce expectedly with their participants. EPs address six benefits and both UNEP FI and INCR describes eight benefits. Then these benefits are classified into three categories by criteria of social externalities, private benefits, and club goods (Prakash & Potoski, 2007). Based on the total numbers of each VEPs' characterized benefits, proportions are derived to determine club standards (Table 6-4). Among the three clubs, UNEP FI has the most stringent standards followed by EPs and INCR. While UNEP FI aggregates a large number of participants with wide eligibility (all types of financial institutions) despite its stringent club standards, INCR and EPs limit to certain financial businesses: investment and project finance.

Table 6-4. Comparative assessment of club standards

	Social externalities	Private benefits	Club goods	Club standard type
Equator Principles	33 %	17%	50%	Stringent-lenient standards
UN Environment Programme Finance Initiative	50 %	12 %	38 %	Stringent standards
Investor Network on Climate Risk	12 %	38 %	50 %	Lenient standards

With identified program types and club standards, further analysis of the three VEPs is conducted. Club Theory determines different types of voluntary clubs by four features: positive social externalities, shirking, branding benefit, and costs (Potoski & Prakash, 2007). The first attribute, positive social externalities, is an obvious reason why VEPs exist, and why financial institutions are interested in working with the clubs. Secondly, as a major problem

for VEPs, shirking can make them unable to achieve their goals. This is discussed later on in this section. Thirdly, VEPs share the branding benefits such as tangible benefits, positive reputation, and goodwill with their participants in return for participants’ enrollment and involvement in the program. Lastly, costs including not only monetary costs but also transaction costs, marginal costs, private costs, and non-monetary costs, are identified as two diverse tools: the inducement to join the programs and the prevention of participant withdrawal. To fully comprehend the EPs, these features are assessed in comparison to the other clubs in Table 6-5 based on previous analyses of table 6-3 and table 6-4.

Table 6-5. Comparative assessment of voluntary environmental programs

	Social externalities	Shirking	Branding benefit	Costs
Equator Principles (Weak Sword & Stringent-lenient Standards)	Moderate to low	High	Low	Moderate to high
UN Environment Programme Finance Initiative (No sword & Stringent Standards)	High	High	High	Moderate to high
Investor Network on Climate Risk (No Sword & Lenient Standards)	Low	High	Medium	Low to moderate

Compared to UNEP FI and INCR, the positive social externalities EPs attempt to produce are more internalized and indefinite social externalities. This should not make any influence on the recruitment, though. By definition of the VEP, it is a “soft-law” (Baldwin & Cave, 1999) program in which its participants may choose not to fulfill their voluntary activity. This issue raises a free-rider problem as known as shirking. Shirking is created when any formal participant takes advantage of what the club offers without performing any adequate voluntary actions. This can harm the VEP’s reputation heavily and cause it to have smaller numbers of new prospective members due to a less attractive view of the program. In order not to have the free-rider problem, Potoski and Prakash (2007) suggest a defense system: third party monitoring, public disclosure of audit information, and enforcement mechanisms as institutional designs. When the VEP requests participating companies to incur a cost to produce social positive externalities, the VEP should enumerate the branding benefit of the program as a return. Goodwill and shared reputation are common branding benefits that the VEP can offer. Having the branding benefit for the participants can be practical particularly when working with society and stakeholders. Setting a membership fee is another way to prevent the free-rider problem and maintains a stronger commitment by the participants.

6.4.2 Institutional Isomorphism

Institutional isomorphism (DiMaggio & Powell, 1983) explains the motivations for financial institutions to join EPs. It has been researched and applied in multidisciplinary academic subjects for the past few centuries under the banner of organizational theory. Institutional isomorphism describes that the morphism isn’t something that has occurred by chance. Instead, it is a result of the organization having been formed through social institutionalization hence typifying the whole process. Isomorphism occurs when institutions within the same field become homogenized (DiMaggio & Powell, 1983). Within institutional isomorphism, there are three different functions: coercive isomorphism, normative isomorphism, and mimetic isomorphism (Figure 6-3).

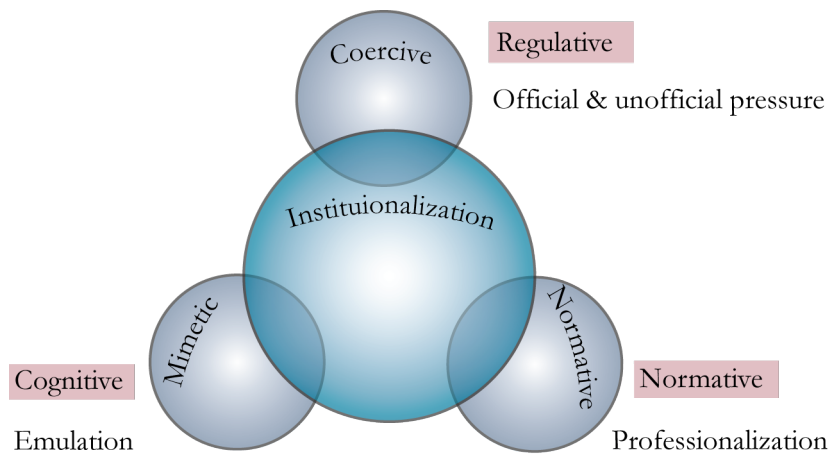


Figure 6-3. Institutionalization

Source: Adapted from Pishdad, Haider & Koronios (2012)

Coercive isomorphism is both official and unofficial pressure brought by professions. The formal pressure includes financial report requirements and governmental mandates such as laws and regulations. For example, a bank adopts a new internal recycling system to conform to a new environmental regulation. The unofficial pressure is much more subtle. Shareholders, stakeholders, and organizations, many of which depend on social expectations from society in general, usually become involved in this type of pressure. For instance, a grass-roots environmental organization, which is dedicated to protecting their local area with limited resources and knowledge, is driven to develop better advocacy and organizational hierarchies to gain more support from hierarchically well-organized environmental organizations.

Normative isomorphism is inspired by professionalization. People engaged in certain occupations try to define their work and justify the autonomy of their professions. The professionalization consists of both or either of 1) formal education by the university producing a group of fungible individuals and 2) growth of professional network support through headhunting by other organizations of a similar nature, also forwarding the isomorphism (DiMaggio & Powell, 1983). It posits that the selection of personnel is an important mechanism.

Mimetic isomorphism is a result of pressure to emulate other actors or approaches when the purpose of an organization is indefinite and situated under uncertain environment (DiMaggio & Powell, 1983). Uncertainty surely reinforces a reason to model other organizations.

The coercive isomorphism with both formal and informal pressure can explain a reason for large and famed multinational financial institutions, which run project finance businesses, to join EPs. To run a business globally can be a burden because a variety of laws and regulations on different levels need to be handled (official pressure). They also know the importance of showing positive social externalities as a reputational risk to shareholders, stakeholders, and the society.

The increased numbers of the EPFIs over several years can be explained by the mimetic isomorphism. Leveraging their existing value or methods gives financial institutions a cheaper risk reduction methodology. Copying an existing approach and/or action from others is easier than standing alone or contriving an approach from scratch. A bank running its project finance department with poor risk management would be interested in reducing this weakness. This type of institution can be easily targeted by environmental NGOs and civil society for

non-compliance and accountability issues. If this happens, the required actions for the bank should produce positive changes and improve its reputation (King & Lenox, 2000). Taking one step at a time can help an institution with weak environmental performance to mitigate uncertain risks they might face in the future. Uncertain risks and a reputational risk lead to explosive diffusion of imitating what EPFIs have done to mitigate potential risks. This method allows any non-EPFI bank to reduce risks cheaply.

6.5 Beyond Compliancy

A corporation actively seeking solutions that decrease environmental impacts and risks and focusing on exceeding by far existing rules and regulations for more sustainable business or service is called beyond compliance leadership (Orsato, 2009). Through investigations on various EPFIs activities, the research has found that Citigroup takes the beyond compliance leadership position by formulating its own internal policies and guidelines based on the EPs and utilizing it to strengthen internal policies. For other EPFIs that merely adhere to EPs, this best practice can lead to more sustainable banking business.

6.5.1 Environmental and Social Risk Management Policies and Procedures at Citigroup

Citigroup is a leading financial institution operating in more than 100 countries around the world. Their business coverage is for individuals, corporations, governments, and organizations. While they offer a private banking business, credit cards, and a financing business (consumer loan business) for individual customers, their other businesses are providing financial products and services such as corporate and investment banking, securities business, and asset management. The group is an original member of the EPs and established a non-traditional risk management policy, Environmental and Social Risk Management (ESRM) Policies and Procedure in 2003 (the latest revision was in March 2006). The core of ESRM has much in common with EPs and IFC Performance Standards.

ESRM is governed by Citigroup's Independent Risk Management Department to monitor all transactions and products, subject to ESRM policy. The ESRM Unit under the Independent Risk Management Department acts as a technical resource and an advisor for all Citi senior management and staff. They handle both internal and external responsibilities: first, monitoring all new transactions and products of the whole company by reviewing and giving advice and consultation; secondly, providing internal ESRM training to implement the policies and procedures; and lastly, tracking and reporting the ESRM work with Citi Corporate Sustainability to outreach to NGOs, SRIs, other EPFIs, and the media.

Transactions and products covered under ESRM Policies include:

- 1) Project finance transactions (subject to EPs) where project capital costs are above US\$10 million;
- 2) Project finance advisories (subject to EPs) with estimated project capital costs of over US\$ 10 million. Citi mandates all projects to make definite arrangements that the sale proceeds will be used for a particular project or investment in the future. Its borrowers agree to the EPs and the introduction of the EPs' adaptation and the advantages of its adaptation for scheduled projects to Citigroup customers. In the case of applying for a Project Finance Transaction, Citigroup requests an indication of their willingness to comply with the EPs;
- 3) Project finance for existing projects and refinancing: estimated capital of over US\$10 million;

- 4) Corporate and government loans involving a total facility amount of US\$50 million (in aggregate);
- 5) Official and export agency loans where the total facility amount is over US\$50 million with a clear intended use of the sale proceeds;
- 6) Acquisition finance with a total facility amount of US\$ 50 million (in aggregate) and a clear indication that the sale proceeds usage will be either in particular projects or assets;
- 7) Debt security placements or underwriting (Bonds) where the underwriter or arranger of debt securities placements or underwritings is in excess of US\$ 50 million (in aggregate value) and there is a clear intended use of the sale proceeds;
- 8) Equity investment or equity underwriting transactions with a clear indication that the sale proceeds usage will be either in particular projects or assets in either a) firm (Citi) equity investment in excess of US\$ 5 million or b) with an underwriter, arranger, or placement agent selling equity securities in excess of US\$ 50 million (in aggregate value);
- 9) LCs, bid bonds, and performance bonds as a relevant instrument in excess of US\$ 50 million (in aggregate) and a clear indication of the sale proceeds usage either in particular projects or assets (Citi, 2012b; Manda, 2007).

Citigroup precludes and does not directly finance:

- *Illegal logging*
- *Production or trade in any product or activity deemed illegal under host country laws or regulations (including those ratified by host countries under international conventions and agreements)*
- *Production or trade in wildlife or products regulated under CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora)*
- *Drift net fishing in the marine environment using nets in excess of 2.5 km in length (Citigroup, 2012b)*

In order to enhance their preclusion from certain businesses, Citigroup incorporates internal specific sector standards in sustainable forestry, palm oil, nuclear, and mountaintop removal mining environmental due diligence process. In addition they have an area of high caution and special focus in ESRM policy. Lastly, for transactions in emerging markets, IFC Performance Standards and WB Group EHS Guidelines are excerpted. For transactions in Australia, Canada, Japan, the United States, and Western European countries, the bank requests compliance with all relevant environmental laws and regulations including impact assessment, public comment processes, and permits.

All transactions and products that are subject to the ESRM policy are classified into three different categories: Category A, Category B, and Category C as defined in the EPs.

In the case of year 2011, out of 433 reviewed transactions, 52 transactions were classified as Category A (Citi, 2012a). Both corporate loans and governmental loans received the most reviews by far. This also translated into more Category A corporate and government loans than Category A project finance projects in 2011 (Figure 6-4).

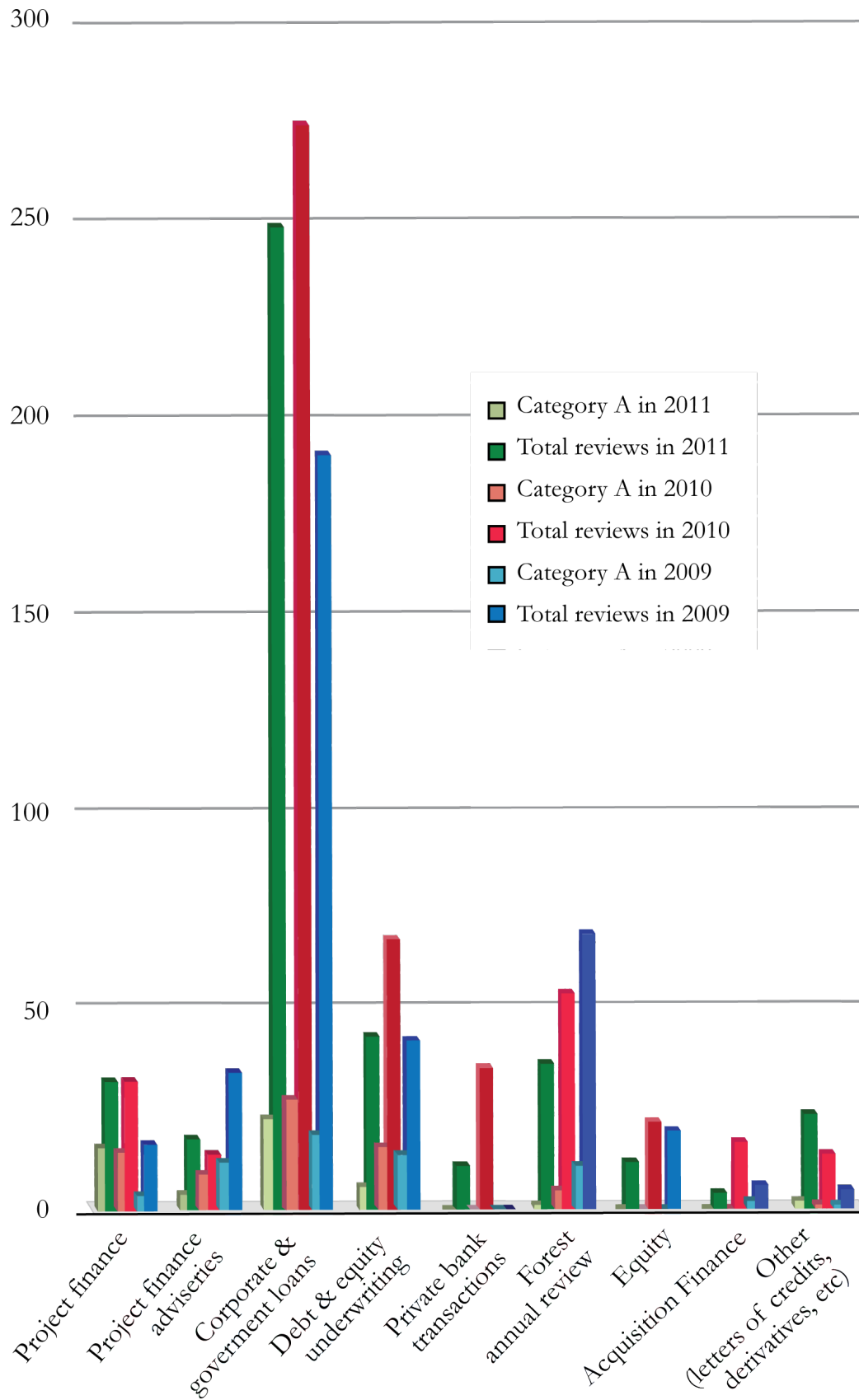


Figure 6-4. Transactions and products that received ESRM reviews in 2011

Source: Citigroup (2012a, 2011,2010)

Because all products and transactions are in line with different processes, this paper explains Citi's ESRM procedure through a project finance transaction case.

First, while a business transactor has an internal review and discussion at the stage of business opportunity identification, a client pursues an Environmental Impact Assessment (EIA). Secondly, after a discussion with all Independent Risk heads, appropriate senior business heads, and control units, the bank categorizes its proposal along with the ESRM policy and EPs. An ESRM director is given notice and grants an approval as a green-lid transaction. In the case it is determined to be a Category A transaction, approvals from an ESRM approver and the ESRM director are necessary. Following the green-light approval, the business transactor submits a proposal letter to the client with appropriate environmental and social requirements according to the determined category and its clarification. Third, based on the client's decision on whether to accept or refuse the proposal, the bank discusses with the client the ESRM policy and its requirements. In the meantime, the bank decides whether to grant preliminary credit approval.

In a due diligence process, the client provides all necessary documentations. Independent environmental and/or social experts must review EIA, Action Plan, and consultation information. (Independent reviews of the borrower's entire documentation is imposed for all Category A and certain Category B project finance transactions as well as non-project finance transactions of Category A projects in areas of high caution. Project finance transactions and corporate loans in emerging markets also refer to the IFC Performance Standards. All Category A transactions and products must create Action Plans based on the EIA results. The borrowers are responsible for consultation with people in the affected area. Category B project finance transactions should review potential environmental and social impacts with independent environmental/social consultants.) The documentation is reviewed at first by both the transactor and an Independent Risk representative with further review by the ESRM director. For Category A transactions, the bank's independent environmental consultant also reviews the EIA documents ensuring compliance with the EPs. The bank reconfirms whether the proposed project satisfies all criteria: the ESRM policy, EPs, and credit analysis standards. (Category A transactions must have approvals by both the ESRM Approver and the ESRM director. As part of the credit review and approval process for all transactions covered under the ESRM Policy, Citi also assesses a client's commitment level, capacity, and track record related to their environmental and social performance.)

Next, after confirming the client's commitment, the bank sets loan terms including the principles of the ESRM policy and EPs and signs on the loan documentation. The client agrees on the loan terms and signs the document, too. Finally, the client with an agreed covenant proceeds with ongoing monitoring and periodic reporting. In some cases, independent experts also make reports. The bank reviews them in a comprehensive manner. In the case of a non-compliance problem, the bank works with both groups to identify the problem and correct it. In a greater non-compliance case, it is reported to the ESRM director, and the current Action Plan gets revised to be compliant.

These steps, based on the ESRM policy and the EPs, let Citi monitor the state of achievement. Out of the 20 reviewed cases of project finance transactions and project finance advisories in 2011, six cases were Category A proceeding cases including five project finance transactions involving US\$ 19.3 million and one involving a project finance advisory as seen in Figure 6-5. The figure displays project size and severity; despite a smaller number of Category A deals, amount of loans provided by the bank are much greater than Category B deals. The important process of receiving extra approvals of relevant personnel and procedures in

Category A is shown; the larger a project becomes, the heavier potential impacts and risk the project might confront.

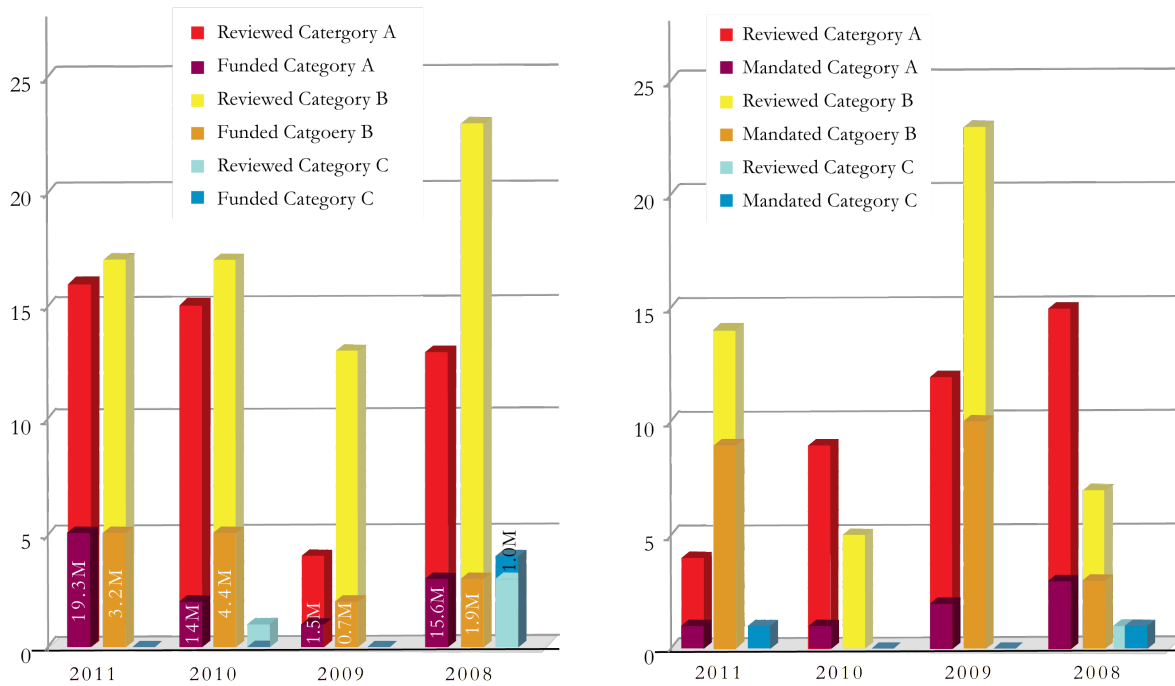


Figure 6-5. Project finance transactions and project finance advisories

Source: Citigroup (2012a, 2011, 2010, 2009)

7 Discussion

Based on the analyses in the previous chapter, though the EPs have made progress in their specific field, according to the Club Theory (Potoski & Prakash 2007), the current status of EPs as a voluntary program has plenty of room to improve. This chapter focuses on the current limitations and barriers of the EPs and potential opportunities to accelerate program development further. In addition, it also discusses the utilization of the Club Theory.

7.1 Intended Financial Transactions and Products

Three institutions: MDBs, ECAs, and private financial institutions participate actively in the business of project finance. Private financial institutions lagged behind as the only cluster without an environmental framework after the other two groups had adopted environmental policies and frameworks. The adoption of EPs at ten leading commercial banks altered the direction to a positive one. Significantly, the EPs are a declaration to refuse providing loans to any project that cannot fulfill the EPFI's environmental and social criteria. It establishes the beginning of a structured playing field in the particular area of financial systems.

EPFIs pay particular attention to large-scale projects in emerging markets that give rise to significant, potential social and environmental impacts and risks. The endorsement of the framework by a majority of the banks operating global project finance businesses is a great achievement. Though EPs cover over approximately 85 percent of the project finance projects in emerging markets (Bergius, 2008), project finance transactions only consist of less than two percent of the average EPFI's lending activities: project finance transactions totaling US\$ 180 million compared to other types of lending businesses such as global syndicated loans of US\$ 2257 billion and the global bond and equity market of US\$ 6447 billion that are not subject to EPs (Gelder, Herder, & Kouwenhoven, 2010). Despite being EPFIs, on the condition that a majority of lending businesses is dealt without the EPs, purposes of EPs become pointless.

These facts led to a dialogue about the EPs coverage; the EPs framework could be extended to other financial products such as corporate finance transactions. The case study of Citigroup in the previous chapter is a good example of how a bank extends the framework to other kinds of transactions and products.

7.2 Positive/Negative Harmonization

As discussed earlier, private financial institutions engage in a wide range of loans, more than just project finance deals. Arranging for different types and levels of environmental frameworks among different agencies can be a trigger for syndicated deals. Collaborating in a common environmental mitigation approach is conducive to a better sustainable development plan. A problem is that banks with stricter environmental policies and procedures might see negative harmonization when considering enrollment in the EPs. Whereas banks with yet-to-be-reached to an offensive banking status (Jeucken, 2001) view that joining in EPs is positive harmonization. The positive/negative harmonization issue is more visible in the emerging markets. Utilization of a project finance construct can accommodate sustainable development in the emerging markets more effectively. However, it only works under the condition that the method is appropriately applied. Otherwise, it may not only destroy the economic growth but also yield long-lasting negative environmental externalities (Kleimeir & Versteeg, 2010). Some enormous commercial banks with project finance departments are not EPFIs (Table 7-1). Deutsche Bank; for example, has its own unique environmental and social risk framework. For those non-EPFI banks, joining the EPs may be viewed as negative harmonization for a few reasons. First of all, by enrolling, modification of their original framework might have to be made along with the EPs. It is too time-consuming and requires

manpower. Secondly, revising their platform may result in less performance in business and sustainability as well as producing less positive externalities. At last, perhaps the EPs are simply not attractive as branding strategies.

Table 7-1. Top 20 banks in 2012

Rank	Bank name	Country	EPFI
1	Bank of America	US	Yes
2	JP Morgan Chase & Co	US	Yes
3	Industrial and Commercial Bank of China	China	Yes
4	HSBC Holdings	UK	Yes
5	Citigroup	US	Yes
6	China Construction Bank Corporation	China	No
7	Mitsubishi UFJ Financial Group	Japan	Yes
8	Wells Fargo & Co	US	Yes
9	Bank of China	China	No
10	Agricultural Bank of China	China	No
11	BNP Paribas	France	Yes
12	Royal Bank of Scotland	UK	Yes
13	Credit Agricole	France	Yes
14	Banco Santander	Spain	Yes
15	Barclays	UK	Yes
16	Mizuho Financial Group	Japan	Yes
17	Sumitomo Mitsui Financial Group	Japan	Yes
18	Lloyds Banking Group	UK	Yes
19	Deutsche Bank	Germany	No
20	Goldman Sachs	US	No

Source: *The Banker* (2012)

According to Institutional Isomorphism Theory (King & Lenox, 2000), in order to mitigate the reputational risk inexpensively, some banks join the EPs because of the ready-made framework prepared by other banks: the mimetic isomorphism reason. Such participants may not be willing to engage in the EPs fully and may cause a free-rider problem. This is one of the reasons why environmental NGOs keep the EPFI's actions under surveillance more than just accepting their verbal commitment. From another perspective, mimetic isomorphism is a significant reputational risk for EPs Association and a concern for active EPFIs.

Club Theory (Potoski & Prakash, 2007) poses that the current EPs are not a strong VEP because it lacks no clear enforcement and a limited review mechanism. Depending on different steering approaches related to social externalities, shirking, branding benefit, and costs, EPs can take another step to alter and reinforce the program. Improving the principles quality in the near future can lead the EPs to have a stronger sword and can demand signatories to continue efforts to meet the stronger standards against shirking and positive social externalities matters. Then, non-EPFI banks may be more attracted to joining the EPs. The theory also explains pros and cons of stringent and lenient VEP standards. Stringent standards are seen as a high-cost VEP to join for prospecting members. In order to produce externalities, a program with lenient standards needs to aggregate low levels of many externalities to attract new participants.

A question the EPs Association and EPFIs must consider; is it better to solicit more members to increase their influence on unpopular regions such as Asia and Eastern Europe or to retain only those members who are faithfully interested in participating in sustainable banking activity? In other words, should the EPs be a harder standard for only some banks or should they maintain a lower standard so more banks including financial institutions from emerging markets would be interested in joining and adopting at least portions of the social and environmental framework?

7.3 Administrative Burdens

Some potential borrowers consider that conducting procedures including a social and environmental impact assessment is an administrative burden because the courses of action are in need of strengthened environmental policies and information disclosure as well as reduced complexity to adherence to national environmental laws and regulations. Consequently, they might seek to procure their loans from either a non-EPFI or a bank with a less stringent environmental policy, which does not require such procedures from borrowers. As a result, some projects with high potential environmental impacts may be carried out without proper mitigation measurements and may cause additional environmental problems in the future. Representative examples are the OCP-pipeline project in Ecuador and the Three Gorges Dams project in China³⁰. In these cases, despite MDBs' disapproval on account of the high environmental risks and dissatisfying environmental risk mitigation plans, private banks decided to finance them. Again, it is important that the EPs are taken into account in the emerging markets. More than 85 percent of project finance transactions in the emerging markets are covered by EPFIs (Bergius, 2008), but banks from the emerging markets³¹ are currently known as non-EPFIs and may be able to influence their societies to a greater degree in the near future.

Another burden is that the EPs are a voluntary initiative, unlike any national law or international treaty, which reflects the borrower country's circumstances. In spite of keeping a higher level of environmental consideration within the borrower's business and its area to facilitate the negative repercussions of the local environment, without country-wide environmental laws and standards, especially in the countries where national laws aren't strong, cooperative work to evolve further sustainable development becomes difficult. In other words, an affected community might be properly handled, but that is only a part of the project host country's domain. As a remedy, treating the vital area is an absolutely imperative action; however, maintaining good relations is fundamental for sustainable development.

³⁰World Bank and Asian Development Bank as MDBs didn't approve the project proposals.

³¹Currently Chinese Industrial Bank is the only EPFI among banks in India, Russia, and China.

Mining and plantation industries, which are prone to cause pollution and disputes with local communities, are examples of sensitive sectors. To start new business or invest in these sectors with loans from EPFIs require support in environmental and social aspects and must pass certain standards. For better sustainable development of the host country, liaising with the country is a strategic solution.

7.4 Corporate Social Responsibility (CSR)/Non-CSR

Some EPFIs seem to regard the EPs under their CSR programs poorly instead of as a front-line decision making process with an internal risk management framework. However, those financial institutions that treat EPs as part of their CSR strategies, should explore harder commitments to sustainability that reflect best practices based on the sustainable development. CSR is an enhancement for improving their direct environmental impact management such as their energy and paper consumption. The project finance business tends to produce more substantial and heavier indirect environmental impacts particularly in remote and sensitive areas (Schepers, 2011). EPs play an important role in reducing their business risks as well as protecting affected communities from projects funded by project finance deals. The former is clearly not for the social good. Particularly, the project finance transaction is typically limited or non-recourse; therefore, the risks a lender bank takes is greater than with other financial products.

Compared to other voluntary programs such as the UN Global Compact, which is a true CSR program³², the transparency and accountability are diluted because of the nature of EPs; sponsored by an industry association and an integrated environmental and social risk framework in a competitive project finance business area are not transparent activities. Environmental NGOs tend to observe industry-sponsored VEPs with skeptical eyes in contrast to government-sponsored and NGO-sponsored VEPs and label non-stringent standard VEPs as “greenwash” activities (Prakash & Potoski, 2007). The unique setting of EPs may have caused confusions to civil society and environmental NGOs. However, the EPFIs’ relation with environmental NGOs shouldn’t be an adversarial relationship. Instead of being criticized by them, EPFIs should have a win-win approach where EPFIs utilize NGOs capacities by welcoming their points of view and exchanging information to aid risk reduction. For instance, some NGOs can assist EPFIs with their strong local networks, making the NGOs experts of the geographical area with varied information.

7.5 Style of the Equator Principles Association

The EPs Association is an independent organization with dispatched staff from EPFIs. In other words, the flattened structure association has no power to be a facilitator, which may cause stronger criticism from external stakeholders. As found with the Club Theory (Potoski & Prakash, 2007), well-established monitoring and auditing systems are important for EPs and EPFIs. Currently if any EPFI breaches a principle, there is no system to identify it and no formal sanction. Perhaps the transparency issue discussed among NGOs can be changed at the EPs Association level at first. The theory also identifies 1) that if the EPs would maintain their current weak-sword club status, non-EPFIs may not be attracted to join the EPs.

³²Anyone can complain the UNGC office about misbehavior of UNGC participants. The reported participant has three months as the probation period to respond. In the case of no response within the three month period, the participant name appears on the UNGC website for the misbehavior.

7.6 Categorization problem

A lower categorization issue may trigger a critical problem especially when a project is assessed as Category B but should be categorized as Category A. Despite a discrepancy among EPFIs, in the nature of the categorization, Category B projects have fewer demanding procedures for both borrowers and lenders compared to Category A projects. The categorization decision in the early stage of the project can cause long-lasting environmental impacts creating irrecoverable circumstances. Once again, revamping the form of the EPs Association can alter this circumstance by strengthening monitoring and auditing systems.

7.7 Usefulness of Club Theory

Information provided through Club Theory does not seem to assess VEPs in a financial sector properly particularly when identifying program types by institution design: two out of three VEPs are assessed as no-sword clubs. A majority of VEPs in the financial sector possibly end in the similar status if an assessment is carried out. The reasons can be the nature of its businesses; it is difficult to estimate actual costs and positive social externalities of VEPs in the financial sector. Or perhaps it may be simply because financial institutions and its VEPs are in a lagged industry compared to VEPs in other sectors. To exercise this assessment universally to diversified VEPs related to various commercial activities beyond a certain industry VEP seems still at a development stage.

8 Conclusion and Recommendation

Qualitative research methods, including literature reviews and theoretical reviews supported explanations and insights into the research questions:

1) How are the EPs being viewed with regard to achieving sustainable development?

Nowadays, private banks are beginning to recognize the considerable influence of reputational risk on their operations. The influence is also related to a highly competitive financial product, project finance, and establishment of EPs and its progress. Thus, the EPs can be presented as a symbol of the progress towards sustainable development found in the competitive project finance field. The important point that should not be ignored is that the EPs as a voluntary form of environmental program, not regally binding, was created by people in the same business field. On the account of the soft-law style of the EPs, a government is not in the position to take any action against a borrower breaching the principles. However, the EPs are still a program that has some meanings. Though there are several VEP programs in the financial sector, the EPs are the first VEP in the project finance business. Identifying uncertain environmental risks not only supports a lender's decision-making process, but also reflects positively on borrowers and people in the affected area in the long-term. If a comparison is made between two scenarios with and without EPs in the project finance sector, it is clear that the EPs existence is a bold step. In spite of the high confidentiality in the businesses, keeping to minimum risks from the initial stage by integrating an environmental and social risk framework is one of the low risk strategies that EPFIs can undertake before the project would create large environmentally and socially related problems. By assisting to mitigate the potential environmental risks of borrowers, EPFIs are able to lessen indirect and reputational risks that may become prominent risks of the lenders. Afterwards, to remove the impacts, it requires no extended time or more efforts. Compared to nine years ago when the EPs were established, the project finance business has made progress in creating better mechanisms for mitigating environmental risks. If the EPs wouldn't exist, the business scene would be different from the current situation; with some likelihood that it would be in a worse state. Environmental NGOs criticize the EPs, but none of them aim to let it disappear. It means that the NGOs recognize the potential of the EPs; what they can achieve. However, the environmental NGOs naturally want them to perform better as it already exists. Their enthusiasm may drive various environmental NGOs to work towards sustainable development. In order to further extend sustainable development in financial institutions, the EPs have taken an indispensable step. In some views, the EPs have been regarded as a long-term negligible step or simply a public relations stunt. These perspective are held by some EPFIs that have joined the EPs for the mimic reason.

2) How have the expectations of the EPs been fulfilled; is there any difference between developing and developed countries?

In terms of the number of EPFIs, banks in developed countries make up the majority of active participants in the EPs, but being signatories doesn't necessarily make them active members. The utilization level and its lending decision mechanism are not equivalent between active and non-active signatories. In addition, the EPs are habitually used in mega-scale infrastructure business throughout the world; therefore, it is noted that sustainable finance is seen as the most-watched, promising future market.

EPs have a more significant role in emerging markets where their economic growth is exponential and demands for funds are stronger than in developed countries. With the achievement of sustainable development, simultaneously reducing environmental impacts and

accelerating economic growth, sustainable finance is considered to function more effectively in emerging markets than countries with existing laws and regulations and inadequate monitoring performance. With the increase in environmental impacts due to the expansion of economic activities in these areas, laws and regulations in some countries have lagged behind in preventing potential impacts so far. Taking into account the degrees of environmental and social impacts in the lending decisions in emerging markets encourages the growth of environmentally sound and sustainable business. Most importantly, a positive spiral only appears when the project finance method is properly utilized.

3) How should the EPs be modified further to assist sustainable development or sustainable banking?

Financial institutions should consider the global scale and importance of long-term sustainable development issues with the realization that the banking system is part of the fundamental social infrastructure of society. Hence, for further sustainable development, EPs Association might want to consider:

Suggestion 1: to revamp the structure of the EPs Association including the establishment of an evaluation mechanism and a monitoring process for further development of EPs. A possible model for their new monitoring system is “report or explain” introduced by the government of Denmark at the Rio +20 conference for a better reporting system for Danish corporations. It was also introduced at the British insurance company Aviva. The system requests corporations to disclose information or clearly explain the arguments for being unable to provide reports. Although a majority of EPFIs would argue that it is against corporate confidentiality, as a matter of fact, corporations in non-financial sectors can disclose to a certain extent. It may be possible for commercial banks to report an additional amount of information particularly related to environmental impacts and risks.

Suggestion 2: to create a more positive relationship with external stakeholders for providing a multidisciplinary sustainable development view to the financial industry. It would advocate a better understanding of what aspects and concerns need to be incorporated for further SD and sustainable finance. Although EPs and its members have an inextricable bond with environmental NGOs for making progress on sustainable development and taking into account reputational risks, the relationship has not been formed to generate a synergistic effect. Interviews with several personnel from both private and public financial institutions (as well as various departments including corporate finance, risk management, corporate social responsibility (CSR), and mergers and acquisitions) have identified that the majority of interviewees are only aware of a small part of EPs or other environmental initiatives. In other words, they do not perceive how EPs as well as voluntary environmental programs (VEPs) link to their work. EPFIs should get along with a variety (an array) of stakeholders and listen to a variety (range) of opinions for minimizing potential environmental risks.

Suggestion 3: to incorporate financial and technical support systems in the environmental and social impact assessment process especially in emerging markets, where potential in prosperity of sustainable development is recognized: producing economic growth as well as positive environmental externalities. The environmental and social impact assessment is conducted in a very early stage: prior to a loan appraisal decision of a financial institution. By this way mitigation measures for the environmental impacts and risks are incorporated as early as possible without pressing management.

Suggestion 4: to provide information in more depth for the social consensus. In terms of the financial industry-wide commitment to environmental and social issues, the project finance

field has had a late start as yet compared to other financial businesses. It is easy to blame a blunt sensitivity to international trends and general lack of public perception of the personnel in the financial sector. In order to move forward with this matter, the EPFIs should explain their activities properly not only to specific groups as well as specialists in sustainable finance and environmental management fields, but also to general public to gain a better understanding of the relation between the players and the subject.

Bibliography

- Baldwin, R. & Cave, M. (1999). *Understanding Regulation: Theory, Strategy and Practice*. Oxford University Press: Oxford.
- Bank for International Settlements, Monetary and Economic Department. (2000). *Guide to the International Banking Statistics*. Basel, Switzerland: Bank for International Settlements.
- Bank for International Settlements. (2005). *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*. Basel, Switzerland: Bank for International Settlements.
- Bank for International Settlements. (2006). *Basel II: International Convergence of Capital Measurement and Capital Standards*. <http://www.bis.org/publ/bcbs128b.pdf>
- The, Banker. (2012). *Top 50 Banks in Top 1000 World Banks 2012*. Retrieved from <http://www.thebankerdatabase.com/index.cfm/top50/index.cfm?fuseaction=top50.default&page=1>
- Bergius, S. (2008). Environmental Standards Loom Ever Larger in Banks' Lending Decisions. *Environmental Data Services Report December 2008(2)*. 6–9.
- Brorson, T. & Larsson, G. (2011). *Environmental Management: How to Implement an Environmental Management System in a Company or Other Organization*. Örkelljunga, Sweden,: Sustainable Improvement.
- Buck, M., Helmchen, C. J., & von Moltke, K. (2002). From Rio to Johannesburg — a business perspective the 7th international business forum August 20–22, 2002, Johannesburg, South Africa official parallel event of the un world summit on sustainable development (wssd). *The International Journal of Life Cycle Assessment*, 7(5), 253-260.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39-48.
- Carroll, A. B. (1999). Corporate Social Responsibility. *Business & Society*, 38(3), 268-295.
- Case, P. (1996). Land, Lending, and Liability. *Chartered Banker*, 2 (4), 44-49.
- Caseili, S. & Gatti, P. (2005). *Characteristics and Common Features of Structured Finance Operations. Structured Finance Techniques, Products, and Market*. Heidelberg, Germany: Springer Berlin.
- Ceres. (2010). *About INCR*. Retrieved from <http://www.ceres.org/incr/about>
- Chen, A.H. (2005). *Rethinking Project Finance. Capital Markets, globalization, and Economic Development*. New York: Springer.
- Citigroup. (2006). *Citi Sustainable Forest Policy Sector Standard*. Retrieved from <http://www.citigroup.com/citi/environment/data/forestry.pdf>
- Citigroup. (2009). *2008 Citizenship Report*. Retrieved from <http://www.citigroup.com/citi/citizen/data/cr08.pdf>
- Citigroup. (2010). *Global Citizenship Report 2009*. Retrieved from http://www.citigroup.com/citi/foundation/pdf/2009_CitizenshipReport.pdf
- Citigroup. (2011). *Global Citizenship Report 2010*. Retrieved from <http://www.citi.com/citi/citizen/assets/pdf/citi.pdf>
- Citigroup. (2012a). *2011 Global Citizenship Report*. Retrieved from http://www.citigroup.com/citi/about/data/2011citizenship_report.pdf
- Citigroup. (2012b). *Environmental Policy Framework*. Retrieved from http://www.citigroup.com/citi/environment/data/937986_Env_Policy_FrameWk_WPaper_v2.pdf
- Citigroup. (n.d.) *Equator Principles: Citi's Typical Project Finance Review, Approval and Monitoring Cycle*. Retrieved from http://www.citigroup.com/citi/environment/data/epca_flowchart.pdf
- Clark, P. (2012, August 18). UN Summit to push for corporate green plans. *Financial Times*, p.13.
- Clayton, N. (2009). The Equator Principles and Social Rights: Incomplete Protection in a Self-Regulatory World. *Environmental Law Review*. 11(3), 173-195.
- Cléménçon, R. (2012). Welcome to the Anthropocene. *The Journal of Environment & Development*, 21(3), 311-338.
- Conley, J.M. & Williams, C.A. (2011). Global Banks as Global Sustainability Regulators? : The Equator Principles. *Law & Policy*, 33 (4), 542-575.

- Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions?. *European Accounting Review*, 14(1), 3-39.
- Department for Environment Food and Rural Affairs. (2012). Measuring and Reporting Environmental Impacts. Retrieved from <http://www.defra.gov.uk/environment/economy/business-efficiency/reporting/>
- DiMaggio, P. J. & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48 (2),147-160.
- The, Economist. (2012, June 23). Many “mays” but few “musts”: A limp agreement at the UN’s vaunted environmental summit. *Economist*, 403 (8790), 64-66.
- Equator Principles. (2006). *The Equator Principles*. Retrieved from http://www.equator-principles.com/images/graphics/ep_package.jpg
- The, Equator Principles Association. (2012). *Members & Reporting*. Retrieved from <http://www.equator-principles.com/index.php/members-reporting/members-and-reporting>
- Export-Import Bank of the United States. (2010). *Products & Policies: Environment*. Retrieved from <http://www.exim.gov/products/policies/environment/envproc.cfm>
- Export-Import Bank of the United States. (2011). *Ex-IM Bank Adopts the Equator Principles to Facilitate Project Finance Application and Review*. Retrieved from <http://www.exim.gov/newsandevents/releases/2011/ex-im-bank-adopts-the-equator-principles-to-facilitate-project-finance-application-and-review.cfm>
- Eksport Kredit Fonden. (2010). *Annual Report 2009*. Retrieved from http://www.ekf.dk/en/about-ekf/EKF-in-figures/Documents/EKF_annual_report_2009.pdf
- Fight, A. (2005). Overview of Project Finance. *Introduction to Project Finance*. Oxford, Butterworth-Heinemann: 1-44.
- FORGE Group. (2000). *Guidelines on Environmental Management and Reporting for the Financial Services Sector*. Retrieved from <http://www.greenbiz.com/sites/default/files/document/O16F20407.pdf>
- Freeman, R. E. (1984). *Strategic Management A Stakeholder Approach*. Boston: Pitman.
- Freeman, R. E. (1999). Response: Divergent Stakeholder Theory. *The Academy of Management Review*, 24(2), 233-236.
- Friedman, M. (1962). Capitalism and Freedom. Chicago, University of Chicago Press Cop.
- Friedman, M. (1970, September 13). The Social Responsibility of Business is to Increase its Profits. *The New York Times Magazine*.
- Gatti, S. (2005). Project Finance. *Structured Finance Techniques, Products, and Market*. Heidelberg, Germany: Springer Berlin.
- Gifford, J. (2012, August 18). Call to governments to prepare for Rio+20. *Financial Times*, p.6.
- Global 100. (2012). *Most Sustainable Corporations in the World*. Retrieved from http://www.corporateknights.com/sites/default/files/pr_global_2012.pdf
- Global Reporting Initiative. (2006). *Sustainability Reporting Guidelines*. Amsterdam: Global Reporting Initiative.
- Gup, B.E. (2005). Insights from Global Survey on Bank Capital. *Capital Markets, Globalization, and Economic Development*. New York: Springer.
- Haack, P., Schoeneborn, D. & Wickert, C. (2012). Talking the Talk, Moral Entrapment, Creeping Commitment? Exploring Narrative Dynamics in Corporate Responsibility Standardization. *Organization Studies*, 33(5-6), 815-845.
- Hunter, D.B. (2008). Civil Society Networks and the Development of Environmental Standards at International Financial Institutions. *Chicago Journal of International Law*, 8, 437-478.
- International Finance Corporation. (2006). *International Finance Corporation’s Performance Standards on Environmental & Social Sustainability*. Retrieved from <http://www1.ifc.org/nps/wcm/connect/ac3381804886593bb892fa6a6515bb18/IFC%2BPerformance%2BStandards.pdf?MOD=AJPERES&attachment=true&id=1322803957411>
- International Finance Corporation. (2012). *Performance Standards on Environmental and Social Sustainability*. Retrieved from

- http://www1.ifc.org/wps/wcm/connect/115482804a0255db96fbffd1a5d13d27/PS_English_2012_Full-Document.pdf?MOD=AJPERES
- Investor Network on Climate Risk. (2009). *Investor Letter to SEC*. Retrieved from http://www.ceres.org/files/Investor_Letter_to_SEC_June_2009.pdf
- Jeucken, M. (2001). *Sustainable Finance and Banking: The Financial Sector and the Future of the planet*. U.K.: Earthscan.
- Kasa, S. (2009). Industrial Revolutions and Environmental Problems. *Confluence: Interdisciplinary Communication 2007/2008*, Oslo, Norway: Centre for Advanced Study.
- King, A., & Lenox, M. (2000). Industry Self-regulation without Sanctions: The Chemical Industry's Responsible Care Program. *The Academy of Management Journal*, 43(4), 698–716.
- Kleimeier, S. & Versteeg, R. (2010). Project finance as a driver of economic growth in low-income countries. *Review of Financial Economics*, 19(2), 49-59.
- Lawrence, P. (2009). Equator Principles: or how I learned to stop worrying and love sustainability. *Impact Assessment and Project Appraisal*, 27 (1), 3-6.
- Macve, R., & Chen, X. (2010). The "equator principles": a success for voluntary codes?. *Accounting, Auditing & Accountability Journal*, 23(7), 890 - 919
- Manda, M. (2007). Environmental and Social Initiatives at Private Financial Institutions. Research on *Environmental and Social Considerations at Developmental Financial Institutions*. Tokyo, Japan.
- Marco, M. (2011). Accountability in international project finance: the equator principles and the creation of third-party-beneficiary status for project-affected communities. *Fordham international law journal*, 34(3), 452-503.
- Massachusetts Institute of Technology. (2006). *Planning for Sustainable Development*. Retrieved from <http://ocw.mit.edu/courses/urban-studies-and-planning/11-366j-planning-for-sustainable-development-spring-2006/>
- Missbach, A. (2004). The Equator Principles: Drawing the line for socially responsible banks? An interim review from an NGO perspective. *Society for International Development*, 47 (3), 78-84.
- Mitsubishi UFJ Financial Group Inc. (2010). *The Bank of Tokyo-Mitsubishi UFJ Signs SPA with The Royal Bank of Scotland Group for the Acquisition of Project Finance Assets*. Retrieved from <http://www.bk.mufg.jp/english/news/news2010/pdf/newse1217.pdf>
- Mulder, H. (2010). *Better Banking*. Retrieved from <http://www.hermanmulder.nl/>
- The, New Business Imperative. (2012). *The New Business Imperative: Valuing Natural Capital*. Retrieved from <http://www.corporateecoforum.com/valuingnaturalcapital/>
- Natural Capital Declaration. (2012). *The Natural Capital Declaration*. Retrieved from http://www.naturalcapitaldeclaration.org/wp-content/uploads/2012/05/NCD_leaflet.pdf
- Natural Capital Leaders Platform (2012). *The Leadership Compact 'Committing to Natural Capital'*. Retrieved from http://www.cpsl.cam.ac.uk/~media/Files/Resources/Leaders%20Groups/Natural_Capital/The_Leadership_Compact_Committing_to_Natural_Capital_2012.ashx
- Organization for Economic Co-operation and Development & United Nations Development Programme. (2002). *Sustainable Development Strategies: A Resource Book*. London: Earthscan Publications Ltd.
- Organization for Economic Co-operation and Development. (2007). *Revised Council Recommendation on Common Approaches on the Environment and Officially Supported Export Credits*. Retrieved from [http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=TAD/ECG\(2007\)9&doclanguage=en](http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=TAD/ECG(2007)9&doclanguage=en)
- Organization for Economic Co-operation and Development. (2012). *Recommendation of the Council on Common Approaches for Officially Supported Export Credits and Environmental and social Due Diligence (The "Common Approaches")*. Retrieved from <http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=TAD/ECG%282012%295&doclanguage=en>
- Orsato, R. J. (2009). *Sustainability Strategies - When does it pay to be green?*. London: Palgrave Macmillan.
- Peeters, H. (2003). Sustainable Development and the Role of the Financial World. *Environment, Development and Sustainability*, 5(1), 197-230.
- Pishdad, A., Haider, A., & Koronios, A. (2012). Technology and Organizational Evolution: An Institutionalization Perspective. *Journal of Innovation and Business Best Practices*, 2012 (2012), 1-12.

- Prakash, A. (2000a). Responsible Care: An Assessment. *Business & Society*. 39 (2), 183-209.
- Prakash, A. (2000b). *Greening the Firm: The Politics of Corporate Environmentalism*. Cambridge University Press.
- Potoski, M., & Prakash, A. (2002). Protecting the Environment: Voluntary Regulations in Environmental Governance. *Policy Currents*. 11 (4), 9-14.
- Potoski, M., & Prakash, A. (2004). The Regulation Dilemma: Cooperation and Conflict in Environmental Governance. *Public Administration Review*. 64 (2), 152-163.
- Potoski, M., & Prakash, A. (2005a). Covenants with Weak Swords: ISO 14001 and Facilities' Environmental Performance. *Journal of Policy Analysis and Management*. 24(4), 745-769.
- Potoski, M., & Prakash, A. (2005b). Green Clubs and Voluntary Governance: ISO 14001 and Firms' Regulatory Compliance. *American Journal of Political Science*. 49 (2), 235-248.
- Potoski, M., & Prakash, A. (2006). Institutional Design for EMS-Based Government Procurement Policies. *Global Environmental Politics*. 6 (4) 13-22.
- Potoski, M., & Prakash, A. (2007). Collective Action through Voluntary Environmental Programs: A Club Theory Perspective. *Policy Studies Journal*. 35(4), 773-792.
- Potoski, M., & Prakash, A. (2011). Voluntary environmental programs: A comparative perspective. *Journal of Policy Analysis and Management*. 31(1), 123-138.
- Reid, D. (1995). *Sustainable Development: An Introduction Guide*. Limited, London: Earthscan Publications.
- Scholten, B. & Dam, L. (2007). Banking on the Equator: Are Banks that Adopted the Equator Principles Different from Non-Adopters? *World Development*. 35(8), 1307-1328.
- Smith, D.R. (1994). *Environmental Risk: Credit Approaches and Opportunities: An Interim Report*. Geneva: United Nations Environment Programme.
- Sneddon, C., Howarth, R. B., & Norgaard, R. B. (2006). Sustainable development in a post-Brundtland world. *Ecological Economics*, 57(2), 253-268.
- Thompson, P. (1998a). Assessing the Environmental Risk Exposure of UK Banks. *International Journal of Bank Marketing*, 16 (3), 129-139.
- Thompson, P. (1998b). Bank Lending and the Environment: Policies and opportunities. *International Journal of Bank Marketing*, 16(6), 243-252.
- Thompson, P. & Cowton, C.J. (2004). Bringing the environment into bank lending: implications for environmental reporting. *The British Accounting Review*, 36(2), 197-218.
- United Nations. (2006). *Johannesburg Summit 2002*. Retrieved from http://www.un.org/jsummit/html/basic_info/basicinfo.html
- United Nations Conference on Sustainable Development. (2012). *The Future We Want*. Retrieved from <http://www.uncsd2012.org/futurewewant.html>
- United Nations Economic Commission for Europe. (2008). *Guidebook on Promoting Good Governance in Public-Private Partnerships*. Geneva, Switzerland: United Nations Publications.
- United Nations Environment Programme. (1999). The Financial Service Sector. *Industry and Environment: Financial Service and Sustainability*. 22(1), 7-8, Paris: United Nations Environment Programme Division of Technology, Industry and Economics.
- United Nations Environment Programme Finance Initiative. (n.d.) *Member Obligations*. Retrieved from <http://www.unepfi.org/benefits/obligations/>
- United Nations Environment Programme Finance Initiative. (n.d.) *UNEP Statement of Commitment*. Retrieved from http://www.unepfi.org/fileadmin/statements/UNEPFI_Statement.pdf
- United Nations Environment Programme Finance Initiative. (2010). *CEO briefing: A document of the UNEP FI Biodiversity and Ecosystem Service Work Stream (BESWS)*. Geneva: United Nations Environment Programme Finance Initiative.
- UNEP Industry and Environment. (1999). *The Financial Services Sectors: Facts and Figures*. January-March, 1999. Paris, France : United Nations Environment Programme Division of Technology, Industry and Economics.

- United Nations Global Compact.(n.d.) *United Nations Global Compact*. Retrieved from <https://www.globalreporting.org/information/about-gri/alliances-and-synergies/Pages/United-Nations-Global-Compact.aspx>
- United Nations Principles for Responsible Investment. (n.d.) *Become a signatory*. Retrieved from <http://www.unpri.org/sign/>
- United Nations Principles for Responsible Investment. (n.d.) *Principles for Responsible Investment*. Retrieved from <http://www.unpri.org/principles/>
- U.S. Securities and Exchange Commission. (2009). *Staff Legal Bulletin*. Retrieved from <http://www.sec.gov/interps/legal/cfs1b14e.htm>
- Weiss, E. B. (1993). Environmentally Sustainable Competitiveness: A Comment. *The Yale Law Journal*, 102 (8), 2123-2142.
- Wilson, C. (2010). Why Should Sustainable Finance be Given Priority?: Lessons from pollution and biodiversity degradation. *Accounting Research Journal*, 23 (3), 267-280.
- World Bank. (2012a). *Operational Manual*. Retrieved from <http://go.worldbank.org/976NSN3O10>
- World Bank. (2012b). *Bank Procedure*. <http://go.worldbank.org/L2LCRJJEHW0>
- World Bank Group. (2001). *What is Sustainable Development*. . Retrieved from <http://www.worldbank.org/depweb/english/sd.html>
- World Business Council for Sustainable Development. (1999). *Corporate Social Responsibility: Meeting Changing Expectations*. Geneva: WBCSD Publications.
- World Commission on Environment and Development. (1987). *Our Common Future: Report of the World Commission on Environment and Development*. Oxford University Press, Oxford.
- World Economic Forum. (2010). *Global Risks 2010: A global Risk Network Report*. Geneva: World Economic Forum.
- Wright, C. & Rwabizambuga, A. (2006). Institutional pressures, corporate reputation, and voluntary codes of conduct: An examination of the equator principles. *Business and Society Review*, 111, 89-117.
- Yescombe, E.R. (2002). What is Project Finance? *Principles of Project Finance*. San Diego: Academic Press.
- Yescombe, E.R. (2007). Public-Private Partnerships. *Public-Private Partnerships: Principles of Policy and Finance*. Oxford :Elsevier.

Appendix

Appendix A: History

May 1954	Adaptation of International convention for the Prevention of Pollution of the Sea by Oil Marine
Dec 1954	Adaptation of Antarctic Treaty
Dec 1954	Adaptation of Protocol on Environmental Protection to the Antarctic Treaty
July 1958	International convention for the Prevention of Pollution of the Sea by Oil Marine came into effect
Jun 1961	Antarctic Treaty came into effect
1970	National Environmental Policy Act in the United States
Feb 1971	Adaptation of Ramsar Convention
1972	The Limits to Growth by the Club of Rome
June 1972	Stockholm Conference; UN Conference on the Human Environment
1972	Establishment of UNEP
Nov 1972	Adaptation of World Heritage Convention
Dec 1972	Adaptation of London Convention on Ocean Dumping
Mar 1973	Adaptation of Washington Convention
Mar 1973	Adaptation of MARPOL Convention
Aug 1975	London Convention on Ocean Dumping came into effect
Dec 1975	Washington Convention came into effect
Dec 1975	Ramsar Convention came into effect
Dec 1975	World Heritage Convention came into effect
1976	OECD Guidelines for Multinational Enterprises
1979	World bank adopted OD 4.01: Environmental Assessment
Jun 1979	Adaptation of Convention on the Conservation of Migratory Species of Wild Animals(Bonn Convention)
1980	Comprehensive Environmental Response Compensation and Liability Act (CERCLA) in the United States
1983	World Commission on Environment and Development (WCED) as known as Brundtland Commission
Oct 1983	MARPOL convention came into effect
Nov 1983	Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) came into effect
Nov 1983	Adaptation of International Tropical Timber Agreement
1984	Announced first social responsible investment (SRI) funds of Europe in UK
1984	First environmental policy at World Bank
1985	Villach Conference in Austria

Mar 1985	Adaptation of Convention for the Protection of the Ozone Layer
Mar 1985	Adaptation of Montreal Protocol
Apr 1985	International Tropical Timber Agreement came into effect
1987	WCED published Our Common Future
1988	Establishment of IPCC
Sep 1988	Convention for the Protection of the Ozone Layer came into effect
Jan 1989	Montreal Protocol came into effect
Mar 1989	Adaptation of Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
1989	Established Environment Unit at International Finance Corporation (IFC)
1989	Introduction of Safeguard Policies at World Bank
1989	The European Commission issued a Directive on Civil Liability for Damage Caused by Waste
1990 -1991	Fleet Factors case; the United States vs Fleet Factors Corporations
1992	Statement by Banks on the Environment and Sustainable Development: UNEP and the 5 members of the Advisory Committee; NatWest Bank, Deutsche Bank, Royal Bank of Canada, HSBC, and Westpac Banking Corporation.
May 1992	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal came into effect
May 1992	Adaptation of Convention on Biological Diversity
May 1992	Adaptation of Cartagena Protocol
May 1992	Adaptation of UN Framework Convention on Climate Change
May 1992	Adaptation of Kyoto Protocol
June 1992	UN Conference on Environment and Development, as known as Rio Summit or Earth Summit
1992	Launched UNEP FI
May 1993	launched UNEP Statement by Banks on the Environment and Sustainable Development
Dec 1993	Convention on Biological Diversity came into effect
Mar 1994	UN Framework Convention on Climate Change came into effect
1995	Established Inspection Committee of the Board at Asian Development Bank
1995	Adaptation of Environmental Procedures and Guidelines at Export-Import Bank of the United States
1995	Established CSR Europe, business network for corporate social responsibility
1995	Launched UNEP Statement of Environmental Commitment by the Insurance Industry
1995	Redrafted the UNEP Statement by Banks on the Environment and Sustainable Development to the UNEP Statement by Financial Institutions on the Environment & Sustainable Development
1995	Stefan Schmidheiny published Financing Change

1997	Kyoto Protocol came into effect
1997	National Westminster Bank in UK discounts for borrowers with environmental management system (EMS)
Jan 1997	International Tropical Timber Agreement came into effect
Dec 1997	UN Framework Convention on Climate Change came into effect
Jan 1998	Protocol on Environmental Protection to the Antarctic Treaty came into effect
May 1998	Adaptation of Rotterdam (PIC) Convention
1998	Safeguard Policies at IFC
Nov 1999	Battle of Seattle; agenda of the World Trade Organization (WTO) and international policies
Jan 2000	Convention on Biological Diversity came into effect
Jun 2000	Revised the OECD Guidelines for Multinational Enterprises
2000	Campaign against banks funding Three Gorges Dam in China
2000	ABN versus Greenpeace Netherlands regarding Indonesian oil palm impacts
March 2001	Published “Government policy on Corporate Social Responsibility in the Netherlands” by Dutch government
2001	Dutch banks announced environment and social policies for lending
2002	Citigroup versus Rainforest Action Network
April 2001	UK government established CSR minister under Department for Trade and Industry
May 2001	Adaptation of Stockholm Convention on Persistent Organic Pollutants (POPs)
May 2002	Established Ministry of Sustainability in France
2002	Sustainable Development as known as Johannesburg Summit in South Asia
Jan 2003	Collevocchio Declaration on Financial Institutions and Sustainability by NGOs at World Economic Forum
Jun 2003	Adaptation of Equator Principles (EPs) in Washington DC
Sep 2003	Cartagena Protocol came into effect
Dec 2003	OECD announced Recommendation on Common Approaches on Environment and Officially Supported Export Credits (OECD Common Approach)
Feb 2004	Rotterdam (PIC) Convention came into effect
May 2004	Stockholm Convention on Persistent Organic Pollutants (POPs) came into effect
June 2004	first South American signatory bank, Unibanco joined EPs
July 2004	Export-Import Bank of the United States revised “Environmental Procedures and Guidelines” according to OECD Common Approach
Feb 2005	Kyoto Protocol came into effect
Nov 2005	First African signatory bank, Nedbank joined EPs
Feb 2006	Established “Policy on Social and Environmental Sustainability” at IFC (Effective on April 2006)
Mar-May 2006	EPFIs meeting with NGOs, clients, industry associations, ECAs on EP II 1) lender’s Due Diligence EP 1, 2, 3, and 7 2) loan negotiation and documentation EP 4 and 8

	3) portfolio management EP 9, and 4) disclosure, consultation and grievance mechanism requirements EP 5 and 6 throughout lending cycle
2006	IFC Policy on Social and Environmental Sustainability
Apr 2007	IFC updated EHS
Apr 2007	Introduced Environmental Policy at Export-Import Bank of China
Apr 2007	EPs incorporated the revise
Jun 2007	OECD published “Revised Council Recommendation on Common Approach on the Environment and Officially Supported Export Credits”
Jul 2007	Revised Equator Principles (EP II)
2007	¾ of project finance were covered by EP with 53 billion of 75 billion granted
Dec 2007	EP steering committee published management structure
Feb 2008	Carbon Principles; Enhanced Environmental Diligence Process for new construction and capacity expansion projects of coal-fired power plant outputs more than 200 megawatts by 3 American private banks; Citi, JP Morgan Chase, and Morgan Stanley.
May 2008	EBRD “Environmental and Social Policy” established (Implemented in October 2008)
Sep 2008	Bank Itau- Unibanco S/A- Brazilian Bank took a Steering Committee Chair
Oct 2008	EBRD Environmental and Social Policy came into effect
Oct 2008	Chinese Industrial Bank has adopted (First Chinese bank)
Dec 2008	Climate Principles: Principles of action for providing guidance to address climate change issues throughout management of financial institutions. Signatory banks are; Credit Agricole, HSBC, Munich Re, Standard Chartered, and Swiss Re.
Jul 2009	ADB “Safeguard Policy Statement; SPS adopted
Feb 2010	Banktrack’s open letter to announce dissatisfaction in the slow progress
Jul 2010	Established EP association- legally binding government structure complete with by laws, voting mechanisms, memberships dues, and rules of excluding members found not to be complying with the obligations of membership.
Jul 2011	Revised IFC’s comprehensive Performance Standard
Jun 2012	Recommendation of the Council on Common Approaches for Officially Supported Export Credits and Environmental and Social Due Diligence (the "Common Approaches"), as adopted by the OECD Council

Appendix B: High-income Countries

High-income OECD members: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Republic of Korea, Luxemburg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States

High-income non-OECD members: Andorra, Aruba, the Bahamas, Bahrain, Barbados, Bermuda, Brunei Darussalam, Cayman Islands, Channel Islands, Croatia, Curacao, Cyprus, Equatorial Guinea, Faeroe Islands, Greenland, Guam, Hong Kong SAR, China, Isle of Man, Kuwait, Liechtenstein, Macao SAR, China, Malta, Monaco, New Caledonia, Northern Mariana Islands, Oman, Puerto Rico, Qatar, San Marino, Saudi Arabia, Singapore, Sint Maarten (Dutch part), St. Kitts and Nevis, St. Martin (French part), Trinidad and Tobago, Turks and Caicos Islands, United Arab Emirates, Virgin Islands (U.S.)

Appendix C: Industry Sector Guidelines

World Bank Group Environmental, Health, and Safety Guidelines

Forestry: 1)Board and Particle-based Products, 2)Sawmilling and Wood-based Products, 3) Forest Harvesting Operations, 4)Pulp and Paper mills

Agribusiness/Food Production: 1)Mammalian Livestock Production, 2)Poultry Production, 3)Plantation Crop Production, 4)Annual Crop Production, 5)Aquaculture, 6)Sugar Manufacturing, 7)Vegetable Oil Processing, 8)Dairy Processing, 9)Fish Processing, 10) Meat Processing, 11)Poultry Processing, 12)Breweries, 13)Food and Beverage Processing

Chemicals: 1)Pharmaceuticals and Biotechnology Manufacturing 2)Coal Processing, 3)Natural Gas Processing, 4)Oleochemicals Manufacturing, 5)Nitrogenous Fertilizer Manufacturing, 6)Phosphate Fertilizer Manufacturing, 7)Pesticides Formulation, Manufacturing and Packaging, 8)Petroleum-based Polymers Manufacturing, 9)Petroleum Refining, 10)Large Volume Petroleum-based Organic Chemicals manufacturing, 11)Large Volume Inorganic Compounds Manufacturing and Coal Tar Distillation.

Oil and Gas: 1)Offshore Oil and Gas Development, 2)Onshore Oil and Gas Development, 3)Liquefied Natural Gas (LNG) Facilities

Infrastructure: 1)Tourism and Hospitality Development, 2)Railways, 3)Ports, Harbors, and Terminals, 4)Airports, 5)Airlines, 6)Shipping, 7)Gas Distribution Systems, 8)Toll Roads, 9) Telecommunications, 10)Crude Oil and Petroleum Product Terminals, 11)Retail Petroleum Networks, 12)Health Care Facilities, 13)Waste Management Facilities, 14)Water and Sanitation

General Manufacturing: 1)Cement and Lime Manufacturing, 2)Ceramic Tile and Sanitary Ware manufacturing, 3)Glass Manufacturing, 4)Construction Materials Extraction, 5)Textiles Manufacturing, 6)Tanning and Leather Finishing, 7)Semiconductors and Electronics Manufacturing, 8)Printing, 9)Foundries, 10)Integrated Steel Mills, 11)Base Metal Smelting and Refining, 12)Metal, Plastic, Rubber Products Manufacturing

Mining: 1)Mining

Power: 1) Wind Energy, 2) Geothermal Power Generation, 3) Electric Power Transmission and Distribution, 4) Thermal Power,

http://www1.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/sustainability+framework/environmental%2C+health%2C+and+safety+guidelines/ehsguidelines