ASSOCIATES FOR GLOBAL CHANGE

Impact of the World Bank Group's Social and Environmental Policies on Extractive Companies and Financial Institutions

Phase One

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INTRODUCTION

This report is the result of an independent research effort commissioned by the World Bank Group's Extractive Industry Review Secretariat, and carried out under contract with Associates for Global Change (AGC), an independent consulting firm based in Washington, D.C. AGC specializes in activities focusing on sustainable development, poverty alleviation, human resources and training, conflict resolution and HIV/AIDS. The firm works both with bilateral and multilateral donor agencies and their partner organizations, as well as with multinational companies working in the extractive sector, particularly in Africa.

This report was researched and written by AGC Senior Associate Richard Everett, with assistance from AGC Research Associate Alistair MacDonald and with editorial support from Andrew Gilboy, Senior Partner at AGC. The data gathering, analysis and report writing was conducted between October 2002 and May 2003.

As called for in the Terms of Reference, the report benefited from two peer reviews, both conducted by Dr. Saleem Ali, Professor of Environmental Planning and Conflict Resolution at the University of Vermont (US). The first reviewed the target organization selection criteria prior to the actual data being gathered in any comprehensive manner. Suggestions were then incorporated into the report's methodology. Dr. Ali conducted a second peer review of the draft final report, from which suggestions were incorporated into the final version of the report.

The following people provided essential information and assistance throughout the development of this report which greatly added value to the product. AGC wishes to recognize contributions from the following people to this effort: Bernard Salome and Julia Grutzner at the EIR secretariat; Dr. Saleem Ali, peer reviewer; Peter van der Veen, John Wilson, and Takuro Kimura of the World Bank and IFC Mining Depts., and Somit Varma of the IFC Oil and Gas Dept. Finally, many of the organizations contacted were forthcoming in making information available which greatly facilitated the difficult task of obtaining data on their environmental and social policies and practices.

EXECUTIVE SUMMARY

In the past several years, the World Bank Group (WBG) has - perhaps without intending it or fully realizing it - become a standard bearer that members of the international corporate community assess themselves against, often regardless of whether they are involved in a direct funding relationship. For example, a trend has been noted that some extractive industry companies, who, for the most part are not direct recipients of WBG assistance, are changing the way they do business and adopting practices that follow social and environmental guidelines similar to those prescribed by the World Bank. To quote the President of a small-sized Canadian mining company, "You can't get funding these days unless your feasibility study fulfills the World Bank requirements. Doesn't matter which lender you go to."

This trend has been further reinforced with the recent adoption by ten leading banks (including two profiled in this research project) of the "Equator Principles," whereby these institutions agree to apply International Finance Corporation environmental and social guidelines to lending criteria for extractive and other projects in developing countries.

This research effort, commissioned by the World Bank Group's Extractive Industry Review Secretariat, examined a number of extractive companies, and the private financial partners and export credit agencies that finance them, to see what–if any–impact the WBG guidelines are having on their environmental and social policies and practices. Research was focused in particular on smaller exploration and production companies (and their financial backers) which are not direct clients of the WBG.

Researchers selected 65 companies for review, all of which indicated some level of environmental and social commitments. These included 20 mining companies, 20 oil & gas firms, 15 private financial partners (including investment banks and venture capital firms active in the extractive industry), and 10 export credit agencies. Company websites, annual reports, investor packages press releases and other publicly available data were collected and reviewed, in order to document companies' environmental and social policies and practices. Researchers identified where the WBG guidelines had already had an impact on these initiatives, and where the WBG could play a useful role going forward.

Key findings include the following:

- <u>World Bank Group policy impacts on small Exploration & Production (E&P) companies appear indirect and minimal to date</u>. There are some signs of a "trickle down" effect from large mining firms and their financial backers that are aware of WBG principles and policies. But there is little evidence to indicate that there is widespread awareness or acceptance among the smaller firms of the guidelines, or what implementing them might entail for their operations. Where companies did cite use of WBG guidelines, the level of public information provided on environmental and social policies often did not provide enough detail to permit a detailed comparison of these policies with those of the WBG.
- <u>The WBG appears to have a more significant and direct impact on private financial partner and Export Credit Agency (ECA) environmental and social initiatives</u>. A number of these financial institutions, including some of the signatories of the "Equator Principles," indicated

that WBG guidelines have become a baseline reference for their activities, providing a useful tool to hold their extractive sector clients to higher environmental and social standards. In addition, some financial institutions say they are implementing their own best practices that go beyond the work of the WBG.

- The environmental and social approaches of extractive companies and financial institutions that *do* address environmental and social issues generally tend to fall into one of three broad categories, reflecting their level of "proactivity:"

  1. Meet local (often minimal) standards. Companies respond on a project-by-project basis, and may do little or nothing to mitigate environmental or social impacts if local authorities do not require or enforce such practices.
  2. Meet commonly and/or internationally accepted guidelines, most notably the World Bank Group and IFC guidelines and Safeguard Policies.
  3. Develop their own "best practice" standards, by going beyond the minimums set by local governments or the WBG to create their own set of principles, policies and practices.

Other findings include the following:

- Small, early-stage companies lag behind larger and/or more vertically integrated ones in adopting policies and practices. Many of the smaller firms active in upstream activities have little or no environmental or social policies of their own. But there are exceptions, including some of the organizations in this research effort. A follow-on research effort to interview executives from these companies could shed light on the reasons that lead some smaller companies to adopt proactive policies.
- Anecdotal evidence does suggest that smaller, upstream firms are feeling increasing pressure to act, from senior downstream companies, financial institutions, government regulators, and civil society. As a result, a number of them have begun to proactively consider these issues, whether willingly or unwillingly.
- More extractive and financial organizations address environmental issues than social ones. Environmental impacts are better defined and can be measured for compliance. Social impact analyses are newer, more qualitative, and harder to quantify in terms of savings or return on investment.
- Company initiatives in their home countries appear more advanced than those implemented elsewhere. A number of the extractive companies reviewed for this project described well-developed environmental and social programs in their home countries. It was unclear if they apply the same standards worldwide, and if they implement the same level of programs in emerging markets as they do at home.
- Financial firms see environmental and social matters as risk issues. Export credit agencies and a variety of financial institutions ranging from venture-capital funds to large investment banks show a higher level of sensitivity to environmental and social issues than their extractive clients.

- Financial organizations are concerned about social issues but want better tools. Several bankers reported struggling with how to address social impacts in lending and investing criteria for emerging-country projects. They use the WBG guidelines as a "default solution," but would like other tools to quantify social risk, and to point their extractive clients towards more socially responsible practices.

Some of the organizations chosen for this study, including small exploration firms and venture capital firms, appear to be proactive in responding to environmental and social challenges. Others may just be coming to the realization that they need to devote more effort to these areas, and will need guidance to make the transition. Interviews with the leaders of these organizations could provide significant insight for other companies struggling with these same issues. Such targeted questioning could also elicit specific recommendations from the industry players themselves as to ways the World Bank Group can improve and better support their efforts in addressing environmental and social concerns.

Issues that merit further study include:

- What are the external and internal drivers, including incentives and disincentives that lead extractive companies–especially early stage exploration and development firms–to adopt environmental and social policies and practices?
- Similarly, what are the drivers affecting private financial partners and export credit agencies to develop their own environmentally and socially responsible policies and practices, and to compel their extractive industry clients to apply the same principles?
- With ten of the largest project finance banks simultaneously agreeing to adopt the WBG-derived environmental and social lending criteria known as the Equator Principles, what impact will this move have on other financial partners, and on the extractive industry recipients of debt and equity financing?
- What are the challenges faced by extractive companies or financial organizations in adopting environmental or social strategies, especially in translating goals and policies into practice?
- What is the role the WBG should play in helping the smaller and upstream firms improve their environmental and social performance? Possible options include:
  - Working directly with these companies (e.g. financial support and technical assistance)
  - Providing traditional WBG clients and partners (larger extractive firms, private banks, ECAs, other multilateral and bilateral agencies) an improved set of carrots and sticks to "incentivize" the exploration companies
  - Assisting emerging market policy-makers and regulators to create better legal, regulatory, and enforcement mechanisms to ensure extractive companies operate to the highest environmental and social standards of practices

A set of targeted interviews, following up on the findings uncovered in Phase One, and probing the issues raised above, would provide a richer picture of the challenges faced by extractive companies and their financial backers in moving toward a more environmentally and socially responsible approach to doing business. And it would provide the WBG further indications on how it can best play a role in bringing this change about.

1.0 PROJECT OVERVIEW

1.1. Research Goals and Objectives

This research effort, commissioned by the World Bank Group's Extractive Industry Review Secretariat, examined a number of extractive companies, and the private financial partners and export credit agencies that finance them, to see what (if any) impact the WBG guidelines are having on their environmental and social policies and practices. Research was focused primarily on smaller exploration and production companies (and their financial backers) which are not direct clients of the WBG.

The Terms of Reference for the AGC study identified the following objectives:

1. Determine the extent to which the social and environmental policies of the WBG are reflected in the stated policies and practices of extractive companies and certain financial partners that have only an indirect relationship with the WBG.

2. Characterize the influences shaping the development of social and environmental policies of these same extractive companies and financial partners, which includes in particular determining the impact of the WBG on policy development.

The research effort is structured in two phases. *Phase One*, which is the subject of this report, addresses Objective 1 fully, while taking into account Objective 2, where such information was available. A proposed *Phase Two* effort would involve interviews with key informants and senior managers of a select group of extractive firms and their financial partners to fully address Objective 2.

Relevance to the EIR

The findings of this research are intended to assist the EIR in its deliberations with stakeholders and in crafting recommendations to the WBG as to what role the WBG should play in the extractive industries. The research findings provide information on the types of environmental and social policies and practices found among extractive companies and their financial backers which do have them. The findings also show where WBG guidelines are being used as the benchmark for some extractive firms and financial partners, as well as where some companies' best practices go beyond what the WBG has done. And the research identifies a number of areas where some extractive firms, particularly those at the exploration and production end of the business, could benefit from more outreach by the WBG.

1.2. Overview of Methodology

In order to address the study's objectives, researchers compiled publicly-available data on environmental and social policies and practices from a sample of mining companies, oil and gas firms, private sector financial partners (including investment banks and venture capital firms) that invest in extractive industries and Export Credit Agencies (ECAs), using the approach described in this section.

1.2.1. Selection of target organizations

A review of each sector was conducted to establish general characteristics relevant to this study, such as industry structure, trends, range of company size and scope of activities, geographic distribution of companies and activities, general prevalence of environmental and social policies. This was accomplished through a review of industry literature, trade press, research publications, and EIR and other WBG resources. Key characteristics are presented as background to each sector.

Subsequently, a number of representative organizations within each sector were selected for closer examination as shown below in Table 1.1:

Table 1.1 Target Organizations

Sector	# of organizations
Mining	20
Oil & gas	20
Export Credit Agencies	10
Private Financial Partners (banks and venture capital funds)	15
Total	**65**

The specific number of organizations chosen in each sector varied. Twenty companies in each of the mining and oil & gas sectors was determined to be an adequately representative number, while keeping the scope of the research manageable. The number of financial partners and ECAs examined was slightly smaller, reflecting the smaller universes from which these organizations are drawn. For example, while there are literally hundreds of mining exploration and production (E&P) firms and dozens of oil & gas E&P companies, there are fewer than 50 export credit agencies worldwide, not more than a dozen of which have significant involvement in the extractive sector. It was decided early on that a weighted, random sampling was not feasible given the time available.

Selection criteria varied according to sector, but generally organizations were chosen to provide a representative sample of firms active in "upstream" extractive activities, and/or their financing. Upstream activities refer to E&P activities in the oil & gas sector, and the exploration, development and production stages in the mining sector.

Also, this project focused on extractive firms and their financial backers active in the four WBG regions of interest to the EIR: Africa, Asia-Pacific, East and Central Europe, and Latin America and the Caribbean.

Because of the large number of organizations to draw upon within each sector, it was essential to focus on those firms that provide readily accessible sources of information about their activities and policies. As such, many of the selected organizations are publicly-traded companies which

have their own websites, issue annual reports and otherwise provide information to the public about their activities. A number of privately held firms that disclose information about their activities were also included to bring additional depth to the analysis.

Considerable efforts were made to identify and analyze organizations that *do* indicate some level of environmental or social consideration in their policies, since this group was deemed most useful in providing insight into the challenges of implementing such policies. The selection, sampling or findings therefore can not be considered representative of the extractive industry as a whole.

Table 1.2 summarizes the selection criteria employed for each sector and the rationale for their use.

Table 1.2 Sector-Specific Selection Criteria

Extractive Companies (Mining and Oil & Gas Firms)	
Selection Criteria	**Rationale**
Contact with WBG: Companies that have no and/or indirect relationship with WBG; i.e. have not been clients of IFC or MIGA, nor have they participated in WBG-sponsored activities that deal with corporate environmental and social policies and practices.	Focus on companies of interest to WBG, but which lie beyond its immediate sphere of knowledge or influence.
Upstream: Preference given to companies active primarily in upstream exploration and development activities, or for which upstream activities are a major company thrust.	WBG has had growing but limited contact with small to intermediate E&P firms to date. Yet exploration stage activities can have lasting environmental and social impacts on communities, and on downstream firms that are WBG clients.
Location: Companies that operate in four WBG regions of interest to the EIR: Africa, Asia-Pacific, East and Central Europe and Latin America and the Caribbean.	Reflects countries where WB, IFC and MIGA are active.
Geographic Diversity: Companies that reflect geographic diversity of E&P players in each sector, including mix of companies from developed economy countries with active mining or oil & gas industries (e.g. Australia, Canada, United States, United Kingdom), and organizations based in four WBG regions of interest to the EIR.	Important to include traditional players and new class of emerging country firms (including recently-privatized state-owned companies) that are expanding outside their home countries.
Multiple Country Operations: Companies that operate in more than one country or region.	Companies with multiple projects under different regulatory regimes may have more explicit policies and procedures than do those who operate only in their own local environment

Table 1.2 Sector-Specific Selection Criteria *(continued)*

Extractive Companies (Mining and Oil & Gas Firms)	
Selection Criteria	**Rationale**
For Mining: focus is on companies that mine precious metals (gold, silver, platinum group metals), base metals (iron ore, bauxite, copper, lead, zinc, cobalt, nickel, etc.), and diamonds.	Targets industry segments in which WBG is active. Coal and industrial mineral firms were excluded to keep scope of project manageable and focused.
For Oil & Gas: include mix of E&P firms that search for oil and gas, as well as drilling & oilfield service companies	Most E&P firms explore for both oil and gas, although some specialization at production and distribution stages. Seismic and drilling contractors participate in earliest stages of E&P projects.
Financing Targets: Export credit agencies and private financial partners that finance extractive industry projects, especially in the development phase, in the four regions of interest to the EIR.	Profiles financial players other than WBG that can influence extractive companies' environmental and social policies and practices.
Contact with WBG: Unlike the selection criteria for extractive companies, ECAs and other financial partners with previous involvement with WBG, including co-lending or other collaboration on projects will be considered.	Nature of industry such that few institutions are active in extractive sector financing that do NOT collaborate with WBG on one or more projects.
Country Spread: Institutions from countries with active global mining, oil & gas industries (e.g. Australia, Canada, United Kingdom, United States) and those from emerging markets in the four EIR target regions.	European, North American, Japanese and Australian institutions are key players in extractive project financing. Emerging market players provide broader perspective on issues.
For private financial partners: include mix of investment banks, private equity funds, and venture capital firms.	Reflects variety of financial partners that finance extractive projects in exploration, development and production stages.

1.2.2. Evaluation Framework

Policy Analysis Objectives

Once a sample of industry players was selected, the primary task of the research was to gather and analyze publicly available information on these organizations in order to:

- Document the information provided on environmental and social policies by upstream extractive industry players and financial backers that have these policies
- Analyze the similarities and differences among the policies and practices of the various companies within and between the different sectors
- Compare how these policies are aligned–or not–with those of the World Bank Group

- Identify (where possible) the impact of WBG guidelines on company policies and practices
- Identify further issues or questions related to the creation and evolution of these policies–including internal or external factors that affect them–that could be addressed in a follow-on interviews with key industry and financial sector executives in Phase Two.

Type of Information gathered

As noted above, all information gathered for the project is current, publicly-available printed or electronic documents, including company websites, annual reports, investor packages, special reports on environmental or special activities, and other materials provided by the companies. Although Phase One did not envisage extensive two-way communications with representatives of the target companies, brief verbal or written exchanges with over a dozen organizations were undertaken which added value to the overall research effort.

As might be expected with corporate communications directed at the investor community and general public, much of the information is expository, that is, describing existing or planned principles, policies or practices. Little information addressed the historical precedents for these policies, although where such information was found, it was included in the analysis. The brief exchanges with a few company representatives provided some additional background . A richer and more thorough picture of the drivers behind company policies will be possible through the interview and survey effort proposed for Phase Two.

Key Data Elements

The data was grouped into the following four categories for analysis:

1. Level of Public information Provided

Company information was scored on the amount and type of information provided using the following scale:

Level of Information provided	Score
No information provided on website, in Annual Report, press releases, investor presentations, or other company public information	0
Single reference (1 sentence to 1 page)	1
Multiple references (2-5 pages)	2
Significant amount of information (>5 pages)	3
Stand-alone environmental and/or social reports	4

2. Public Commitments to Environmental and Social Principles and practices

The core of the analysis was a review of the stated policies, statements of principle and activities of the target organizations in the areas of environment, health and safety (often combined with environment under an "EH&S" rubric), social responsibilities and/or community relations as defined below:

- **Policies:** defined as a titled "Policy" (e.g. Environment Policy, Safety Policy, Social Policy, etc.), usually running from several lines of text to one page in length, as a series of bullet points, such as those found in the text boxes of this section. Examples of complete company policy statements are included in the Annexes to this report.

Policies

Projects will be designed and managed to reasonably minimize risk and mitigate negative impacts on the environment. (Hecla Mining)

The PGS Group will…ensure that all its current and future activities are analysed for their possible impact on the environment and will put in place systems found to be cost beneficial in mitigating or totally removing this environmental impact. (Petroleum Geo-Services)

We shall promote safety, health and environmental awareness and interaction among our employees, suppliers, contractors, host communities, and other interest groups.

(Lepanto Mining)

The EIA Policy…provides a structured framework through which the potential environmental impacts of a project are assessed, options are evaluated, and appropriate action to be taken in mitigation of those impacts is identified. (Barclays PLC)

- **Statements of Principle:** other written declarations of commitment to environmental or social principles or practices, many of which resemble formal policies in terms of their tone and content.

Principles

Resolute firmly endorses a pro-active approach to positive participation in the communities in close proximity to its mining operations... (Hecla Mining)

Marubeni Group, aware of its responsibility as a good corporate citizen, will do its utmost to preserve the environmental well-being of the earth, while striving for the harmony and prosperity of human society (Marubeni Group)

We intend to shrink and lighten the environmental footprint of our operations. (Santos Ltd.)

We aim to take account of social, ethical and environmental aspects when entering into customer and supplier relationships and in assessing financial propositions, as well as in the treatment of our own workforce. (Barclays PLC)

- **Activities:** descriptions of existing or planned environmental or social programs and activities. Types of activities are described later in this report

3. Standards of Practice

This term refers to written references to standards, regulations, and management practices followed by an organization. They may be internal standard, or ones set by outside authorities such as governments, industry groups, etc.

Standards of Practice

[We] adhere to stringent environmental standards that meet or exceed those in North America. (Kinross Gold)

We proceed based on World Bank guidelines and Australian industry best practices. (Anvil Mining)

Our goals are…to comply with all applicable standards of [the] international oil industry in addition to the laws and regulations of States where we are present. (Perenco)

We are committed to strictly observing relevant laws, regulations, and internal rules and to acting with fairness and integrity in conformity with the common values of society at large,…we also make continuous efforts to operate in ways that reflect internationally accepted standards. (Bank of Tokyo–Mitsubishi)

4. Other Indicators

The research also looked for the presence of other management and operational structure and mechanisms which can indicate that environmental or social policies are being translated into practice. These include whether an organization…

- Charges Board Committees or senior management staff with explicit environmental or social responsibilities, as defined by their title, e.g. "Audit and Environment Committee," or "Vice President, Community Relations"
- Implements Environmental Management Systems, Environmental Management Programs, or Environmental Management Plans
- Implements "continuous improvement" management techniques for handling environmental matters
- Mandates that contractors, suppliers and/or joint venture partners follow company environmental or social policies or practices
- Implements a program of regular internal or external audits for environment, health and/or safety matters
- Has applied for or obtained ISO 14000 or ISO 9000 certifications (independently-verified management standards established by the International Standards Organization (ISO) – ISO 14000 pertains to environmental management systems, while ISO 9000 covers quality management systems)
- Has received other environmental, community relations, or other related “Best Company” awards from governments, industry associations, other organizations
- Is included on a "green" or "socially responsible" stock index such as the Dow Jones Sustainability Index, or the FTSE4Good Global 100. (These filter stock picks to include only companies that meet certain environmental and/or social responsibility criteria.)

1.2.3. Comparison of Company and WBG Policies

One objective of this study was to explore the extent to which environmental and social policies of extractive firms and their financial backers matched those of the WBG.

The WBG has developed a number of detailed policies and guidelines which give guidance on environmental and social issues to companies that are planning extractive or other projects, and the lenders that may finance them. These include the World Bank's Pollution Prevention and Abatement Handbook (PPAH), the IFC's Environmental, Health and Safety Guidelines, the IFC's Handbook for Preparing a Resettlement Action Plan, and the WBG's Safeguard Policies. The first two are handbooks with sector-specific guidelines for responsible practices, the third covers resettlement issues and practices.

The Safeguard Policies are more general policy guidelines. They broadly address how to conduct Environmental Assessments, as well as providing guidelines for:

- Environmental and Legal issues: Natural Habitats, Forestry, Pest Management, Safety of Dams, International Waterways, and Disputed Areas, and:

- Social Issues: Involuntary Resettlement, Indigenous Peoples, Cultural Property, Forced Labor and Harmful Child Labor.

Information from each organization was reviewed to compare them with the above policy and practice guidelines. The level of environmental and social policy information provided by selected organizations varied greatly, from less than one page for many extractive companies to dozens of pages for one export credit agency. As such, the methodology and results of comparing the organizations' policies to those of the WBG varied by sector, and is presented in each sector discussion.

2.0 MINING

2.1 Sector Overview

As MMSD noted in its comprehensive report *Breaking New Ground*, the mining industry is small relative to other industries, including other extractive sectors: the top 150 international mineral companies had a combined market capitalization of $224 billion at the end of September 2001, less than that of single major oil company, ExxonMobil.[1] Mining industry returns are generally more volatile than those for oil & gas. And despite a recent spike in gold price, the hard rock metals mining industry as a whole has not been doing well, although certain projects and companies are successful.

The United States, Canada, the United Kingdom and Australia are the primary home bases and sources of financing for most senior and junior industry players. Yet there has been a growing trend towards internationalization of exploration activities in the past decade, due to falling ore grade values in home countries and the opening of developing economy markets to exploration. There are also an increasing number of players from emerging economies, including newly-privatized state-owned entities, such as Russia's MMC Norilsk Nickel, and Indonesia's PT Timah, which were included in this study.

Industry concentration has been increasing through mergers and acquisitions in recent years, especially at the upper end of the industry, where intermediate and senior companies are joining to control larger percentages of their mineral asset base. For example, a Canadian intermediate firm reviewed in this study, Kinross Gold, is merging with two other intermediate Canadian firms, TVX and Echo Bay, instantly transforming the new entity into the world's seventh-largest gold producer.

There is a high level of interdependence between juniors, that focus on exploration, development and–in some cases–production (especially so-called "expansionary juniors"[2]), and intermediates and seniors that are more focused on ramping up production after others have done the exploratory work. Some vertical integration is also occurring within the industry, although it is less pronounced than in the oil and gas industry, and generally limited to the base metals and fuel minerals. Rather the interdependence is increasingly being cemented through strategic partnerships between exploratory juniors and producing seniors. These partnerships provide juniors with financial backing and captive customers for their promising finds, while seniors can gain access to an independently developed stream of potentially bankable projects.

As a result of poor economic conditions and consolidation trends, some industry analysts suggest there has been a thinning of the ranks in the middle of the industry pyramid, as the more aggressive and successful intermediate firms merge their way to the top, unsuccessful intermediates shrink or disappear, while the vibrant but inherently risky and unstable population

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[1] Mining, Minerals, and Sustainable Development (MMSD), *Breaking New Ground, The Report of the MMSD Project*, 2002.

[2] Alistair MacDonald, *Industry in Transition: A Profile of the North American Mining Sector*, MMSD, 2002.

of juniors at the lower end continue to scramble for financing to pursue new exploration opportunities.[3]

Many emerging market communities' first exposure to the mining industry is through these exploration juniors. These firms' environmental and social practices—or lack thereof—can color a project and create a legacy that extends through the production cycle. Hence the growing interest of seniors (and their financial backers), who inherit this legacy and the attendant risks when they move into production, in seeing the early stage companies adopt better environmental and social policies and practices. And hence the interest of the WBG in seeing if its policy guidelines have penetrated this segment of the industry.

2.2 Selected Target Organizations

As noted above, twenty mining companies active in exploration activities were selected for review (see Table 2.1 below). They include a mix of large and small firms, based in and operating in a geographically dispersed set of countries. All are involved in exploration activities in some way, and more than half are also involved in production.

2.3 Results & Analysis

Amount and Types of Information Provided

Among the mining companies reviewed for this project, most tend to provide a fair amount of information about social and environmental matters, including multiple references to environmental or social policies and activities on their websites and in their annual reports activities (see Table 2.2 below). Generally speaking, the larger and more established the mining firm, the more information is provided about its activities in its public documentation. Junior mining firms, especially those in exploration phase, typically have less to say about their activities, beyond touting the strengths of their management team and results of their latest exploration activities. Firms which have one or several mines in production may have more to report, including information on how they interact with the nearby communities.\

Three companies issue formal published reports on their environmental and/or social activities, one company issued its report as an insert to its annual report, while two companies provided stand-alone reports detailing their activities on one project or one country. In both of these cases—one involving a company's mine in Russia and the other a company's activities in Mongolia—the reports appear to have been written at least in part to counter past stakeholder criticism of their projects.

[3] MacDonald.

Table 2.1 Selected Target Mining Companies

Company	Home Office	Type	Total Assets 12/31/02 US$ Million	Minerals	Emerging Economy Assets & Activities
1 MMC Norilsk Nickel*	Russia	Senior	9,058.0 (12/31/01)	Nickel, Copper, PGMs, etc.	Russia
2 Kinross Gold Corp.	Canada	Intermediate	598	Gold	Russia, Chile, Zimbabwe
3 Glamis Gold	USA	Expansionary Junior	474.5	Gold	Mexico, Guatemala, Honduras
4 Ivanhoe Mines Ltd.	Singapore/ Canada	Expansionary Junior	272	Copper, Gold	Myanmar (Burma), Mongolia
5 PT Timah	Indonesia	Small producer	184.8 (12/30/01)	Tin, Other Metals	Indonesia
6 Hecla Mining	USA	Expansionary Junior	160.1	Silver, Gold	Mexico, Venezuela
7 Lepanto Consolidated Mining Co.*	Philippines	Small producer	150.7 (9/30/02)	Copper, Gold	Philippines
8 Eldorado Gold Corp	Canada	Junior	140.1	Gold	Turkey, Brazil
9 Metorex Ltd.*	South Africa	Expansionary Junior	80.8	Gold, Copper, Zinc, Manganese, Antimony, Coal	South Africa, Zambia, other southern African countries
10 Resolute Mining Ltd.*	Australia	Junior	76.0	Gold	Tanzania, Ghana, Burkina Faso
11 TransHex Group	South Africa	Junior	41.5	Diamonds	Namibia, S. Africa
12 Kenor*	Norway	Junior	29.1	Gold, other Precious Metals	Guinea, Ghana
13 Oxus Mining Plc	UK	Junior	26.3	Gold, Silver	Uzbekistan
14 Minmet Plc	UK	Junior	14.7	Gold, Silver, Zinc, Copper, Diamonds	Peru, Honduras, Brazil, Dominican Rep.
15 Anvil Mining	Australia	Junior	12.9	Copper, Gold, Silver	DR Congo, Vietnam
16 Lafayette Mining Ltd.*	Australia	Junior	10.0	Gold and Base Metals	Philippines
17 First Point Minerals Corp.	Canada	Junior	2.4	Gold, Silver, Zinc, Lead	Honduras, Nicaragua
18 Hunter-Dickinson Inc.	Canada	Holding company for juniors	Undisclosed	Copper, Zinc, Lead, Gold, Silver	Mexico, South Africa
19 Milpo Group*	Peru	Small producer	Undisclosed	Zinc, Copper, Lead, Silver	Peru, Chile
20 Ongopolo Mining & Processing Ltd.	Namibia	Small producer	Undisclosed	Copper, Lead	Namibia

* = included per suggestion of IFC and WB Mining staff

Table 2.2: Level of Public Information Provided on Environmental and Social issues

Level of Public Information Provided	No. of Companies
No information provided on website, in Annual Report, press releases, investor presentations, or other company public information	1[4]
Single reference (1 sentence to 1 page)	2
Multiple references (2-5 pages)	9
Significant amount of information (>5 pages)	5
Stand-alone Environmental and/or Social Reports	3

Note: Total number of companies is 20. Some appear in more than one category.

Public Commitments to Environmental and Social Principles & Practices

Environment: Around two-thirds of the 20 mining companies reviewed for this project include explicit environmental policies in their public information, including websites, Annual Reports, and other investor and marketing materials (See Table 2.3 below). In addition, all but one of the 20 also provided other statements of environmentally-related principles or positions, and all but one described environmental programs or activities they had undertaken.

Health & Safety: Indications of Health and Safety policies, statements, and activities were less numerous than either environmental or social initiatives, and were frequently grouped with environmental matters under a single E,H & S rubric.

Social Development/Community Relations: The number of companies with explicit social policies was less than half those that had environmental policies, although all but two of the firms had other social statements of principle, and over three-quarters provided information on activities involving nearby communities.

Typical environmental and social activities undertaken by the mining companies are described later in this section.

Most of the policies took the form of a single page of bullet points embodying key company principles. Some included supporting points describing how they were to be implemented. Most of the mining firms' mission and vision statements were focused primarily on stockholder return on investment or on becoming industry leaders in mineral production. However, around a third of the companies reviewed in this study include environmental and social goals or values in their mission and vision statements.

[4] Canadian junior First Point Minerals provides no information on environmental or social policies or practices on its Website, but is known to have them. Policy information was gathered in a brief phone interview, and via email. More information on First Point, and the value of including it in this study, in a company spotlight at the end of Section 2.

Table 2.3 Public Commitments by Mining Companies

Public Commitments	Environment	Health & Safety	Social and/or Community Relations
Explicit Policies	13	4	6
Other statements of principle	18	13	16
Has either Policy, or statement, or both	19	14	18
Has neither Policy nor statement	1	6	2
Principles included in corporate Mission, Vision, or Strategy statements	8	6	6
Programs and Activities	19	11	16

Note: Total number of companies is 20. Some are counted in more than one category.

Standards of Practice

Nearly a third of the companies said they abide by local standards (see Table 2.4), in some cases this was qualified as "meeting or exceeding" those standards. For companies that set higher goals, Australian mining practices were cited as the benchmark not only by Australian firms, but also by one Canadian and one Scandinavian mining firm. North American standards were also cited, while a number of firms said they aspired to "world class" or "international" best practices, although it was unclear what yardsticks they were applying.

Three companies cited World Bank guidelines as their benchmarks, without providing additional details. Two Australian firms, Anvil Mining and Lafayette Mining, described how they had carried out exploration and development work in the Democratic Republic of Congo while World Bank and IFC officials were in-country helping the government rewrite its Mining Code, which may explain their awareness of WBG guidelines. One U.K mining junior, Oxus Mining, stated in an investor presentation that it had conducted an "environmental audit to full World Bank standards" for a project in Uzbekistan. However, the WBG standard may have been a project finance requirement imposed by its London and Paris bankers, since it was the only reference to environmental matters found in the company's public information.

Three companies suggest that they have proactively set their own standards, marking a determination not only to go beyond local requirements, but also to establish their own benchmark as a national or industry leader. One firm, Hunter-Dickinson, Inc. claims that its environmental commitment "goes far beyond compliance with government regulations and standards" and that it seeks to "create the best environmental management plan for each site." although it was unclear from its website how these commitments are met. The Canadian company, which is a private holding company for a stable of publicly-traded junior mining firms, did note it has a team of specialized consultants which evaluates and plans for environmental and other risks on every project the company invests in.

Table 2.4 Standards of Practice cited by Mining Companies

Standards of practice cited by companies	No. of companies	Comments
Local Standards	6	May vary by country
Home office country and/or other recognized international standards	8	Australia, South Africa, Canada, U.S. standards cited
Unspecified "international" or "world class" standards	5	No details provided on specific benchmarks
World Bank Guidelines	3	No details provided on how these are met
Sets own standards, seeks best practices	3	Proactive approaches to exceeding requirements

Note: Total number of companies is 20. Some are included in more than one category.

Policy Comparison with WBG Guidelines

As noted above, three mining firms indicated they followed WBG guidelines, without providing any details. Mining company environmental and social policies–where they were available–were generally less than a page long, and limited to general statements of principle. As such, it was difficult to compare them with the WBG guidelines, which are quite detailed. Over half of the companies referenced some form of Environmental Assessment, usually in the form of an Environmental Impact Assessment that was required by local government authorities or financial partners. About a quarter of the companies noted they respected cultural property, and one firm operating in Myanmar noted that it had a formal policy against the company or any of its partners using child labor or forced labor.

Other Indicators

A review of the mining companies' public information provided other indicators of how policies and principles are translated into specific actions (see Table 2.5 below):

Dedicated Board/Senior Management Responsibilities: A small minority of companies has designated their Board and Senior management with explicit responsibility for environmental issues. One possible impetus for this move: Several of the firms with Board Environmental Committees have ongoing environmental remediation activities and/or litigation related to now-closed North American mine properties. Several firms have created vice president and/or corporate officer-level positions responsible for the environment, indicating full-time senior management focus on related issues. No Board committees and only one senior manager were identified as having explicit social or community relations responsibilities. Although other companies may have persons responsible for these areas, they may handle those issues as part of a larger portfolio of responsibilities.

Table 2.5 Other Indicators

Category	Indicator	No. of Companies Reporting
Strategic Oversight & Management Systems	Board Committees with explicit Environmental oversight responsibility	3
	Board Committees with explicit Social/Community Relations oversight responsibility	0
	Senior Management with explicit Environmental Title/Responsibility	6
	Senior Management with explicit Social/Community Relations Title/ Responsibility	1
	Has implemented Environmental Management Plans	6
	Has implemented Environmental Management Systems	4
	Applies continuous improvement management techniques to environmental activities	5
	Requires contractors, suppliers and/or JV partners to follow company environmental or social policies & practices	4
Performance Audits & Verification	Internal Audits (primarily Environment, Health & Safety)	7
	Outside Audits (primarily Environment, Health & Safety)	9
Certifications and Awards	ISO 14000 Series Certification (Environmental Management Standard)	3
	ISO 9000 Series Certification (Quality Standard)	1
	Has received other environmental, community, best practice, etc. awards (from governments, industry associations, other organizations)	8
	Included in "green" or socially responsible Stock Index (e.g. Dow Jones Sustainability Index, FTSE4Good Global 100, etc.)	0

Management Systems: Around a quarter of the companies have implemented Environmental Management Systems, Programs, or Plans, and a similar number (many of them the same firms) indicated that they proactively look for ways to continuously improve their environmental performance. Only four companies specifically noted that they require contractors to follow company principles and practices.

Performance Audits: Nine companies use independent, external auditors to monitor environmental performance, identify issues, and suggest improvements, while seven conduct internal audits (these two groups overlap). Although not shown in the table, about half of the internal and outside audits also cover health and safety issues. Four companies made no mention of whether internal or external audits were conducted.

Awards & Certifications: Three companies have ISO 14001 certificates, including one, PT Timah, which is also ISO 9001 compliant. Two of these firms, Ivanhoe Mining and Milpo Group, have ISO 14001-certified mines in Myanmar and Peru respectively, while integrated explorer/producer PT Timah has certified its metallurgy facility and workshops. PT Timah, which has four ISO 14001 and two ISO 9001 certifications in all, demonstrates a trend observed among some proactive mining and oil & gas firms. When companies obtain an ISO 14000 or 9000 series certification for one business unit, it is often the first step down a path to systematically certifying all its facilities. Eleven of the firms provide information on awards or certifications they have received for environmental, health and/or safety activities, mostly from national government agencies, business associations or foundations. None of the mining firms reviewed here indicated that they are included in any of the sustainability stock indexes, although there are some mining firms, including Rio Tinto Plc and BHP Billiton that appear in these indexes.

When looking at a company's operational commitment to environmental or social matters, the larger mining companies with production and downstream operations might be expected to be more involved in – and provide more information about – environmental and social practices. However, a fairly even representation of companies of all sizes and stages existed for many of the indices used, including policy statements, activities, auditing and reporting, contractor requirements, and general indications of proactivity. This suggests that some small and early stage companies can and do commit themselves to implementing environmental and social activities. More research is needed to verify this observation and understand how the motivations of a small firm may be the same or different than those of larger firms. One view is that the subcontracting requirements of large firms are pushing some smaller firms into adopting these practices.

Environmental Activities

Types of environmental activities described in company information tended to track their position in the mining production cycle

- Most of the environmental activities described by the smaller of the junior firms were focused on baseline studies and environmental impact statements for exploration and early stage development projects.

- A broader cross-section of firms described ongoing management and monitoring of environmental issues for development and production stage mines. While many of the descriptions were nuanced, it was clear that despite having implemented new environmental measures, in some cases companies are making little progress in meeting the requirements of existing standards. Norilsk Nickel, a Russian mining company with major smelting operations, noted it pays heavy fines to the Russian government every year for regularly

exceeding soil, air and water pollution standards, despite having implemented an environmental policy.

- A large group of firms described remediation and rehabilitation efforts prior to or after mine closure. In some cases, particularly for U.S. and Canadian mining firms, the primary–if not only–references to environmental activities were descriptions of ongoing litigation or rehabilitation activities where governments had mandated clean-up of old North American mines, including one which was designated a Superfund site. Several firms operating in emerging markets described how they had begun to prepare for closure before or during the production stage, including reclamation and rehabilitation activities being carried out on unused land alongside active mines, etc.

Occupational Safety and Health Activities

As noted above, occupational health and safety activities are often included as part of integrated EH&S program. Typical programs included safety training programs, alert systems, injury statistics reporting, and provision of medical facilities for workers and their families, and HIV/AIDS awareness programs.

Social/Community Relations Activities

In general, the longer a company had been operating a mine, the more likely it was to have community activities. In some cases, longstanding production and processing operations such as Norilsk Nickel in Russia provide significant support to local communities, often as a supplement to or in lieu of or government services, which may be minimal in remote areas.

Social or community relations activities described by the companies included the following:

- Provision of infrastructure, such as roads, water supply, power, community buildings
- Technical and other job-related training for local residents, including potential mine employees
- Support for local schools, including construction of buildings, and donations of books and supplies
- Support for local health facilities, including construction of buildings, provision of supplies, seconding of company medical staff and/or vehicles
- Small business development activities, including training and technical assistance, often using inactive or closed mine property for vegetable gardens, cash crops, fish farms, etc.
- Other philanthropic activities including support or sponsorship for local sports and arts programs, employee volunteer programs, etc.
- Many of the above programs are done under the auspices of community development and empowerment programs, where local communities formulate requests for types of assistance needed.

2.4 Selected Case Studies

Ongopolo Mining & Processing Ltd.

Ongopolo Mining was formed from the ruins of a bankrupt mining endeavor, the Namibian Tsumeb copper and lead mine and smelting facility. Previously run by holding company, Gold Fields Namibia, Tsumeb was placed in liquidation, leaving a major employer shut down, and a number of environmental problems at the processing facility unresolved. Then a partnership of labor unions, former company managers, and government agencies came together to devise a plan to reopen the facility as a wholly Namibian-controlled company. Management and staff have ownership stakes in the new company, as do union investment firms and new private investors. All were asked to contribute to financing an Environmental Rehabilitation Trust Fund to cover past, present and future environmental and safety costs. The company has also eliminated some of the more toxic processes carried out by its previous owners, and is implementing an environmental remediation plan drawn up by outside consultants, which is subject to external audit. Management has also begun to address health issues, particularly HIV/AIDS awareness and prevention, for its employees and their families, through a Namibian Chamber of Mines-led program. Ongopolo is an interesting model of how a partnership of private, public, and civil society players can turn around a production facility with a poor economic and environmental legacy, although it all hinges on the new management team's ability to return the operation to profitability.

First Point Minerals

First Point Minerals is a Canadian mining junior provides no information on environmental or social policies and practices on its Website or in its investor materials. In that respect, it appears to resemble many of its Vancouver-based mining junior colleagues, with investor-oriented public information that touts the "mine-finding" credentials of its management team, and the progress of its exploration activities. However, First Point is an example of junior mining company that says it is sensitive to environmental and social issues, but doesn't publicize it. In an interview, First Point CEO Peter Bradshaw said the company has written policies on the environment and community relations (which he later shared by email), but has chosen not to post them on the Website. He said with only four geologists in his office, there was little interest or time for creating or disseminating elaborate documents or web pages, since his team all know and work from a clear set of environmental and social principles. According to him, those principles were honed from decades of collective, on-the-ground experience on exploration and development projects in Canada, Australia, Latin America, and Papua New Guinea. This firm was specifically included in this study to show that there may junior and other small players committed to social and environmental responsibility but which choose not to spend time documenting or presenting their principles to the outside. This approach works when a company is run by a small, tight-knit group of like-minded managers. But it can falter if a company adds new managers or staff who are unaware of or who do not support the largely unwritten principles espoused by the founders.

TransHex Group

TransHex Group is a South African alluvial diamond mining firm with a unique approach to a perennial challenge faced by mining firms and nearby communities alike: the influx of artisanal miners during and after mining operations. TransHex awards contracts to a limited number of formally recognized "small miners," groups of local residents that include women's organizations and other entrepreneurs who have an interest and experience in artisanal mining. These entrepreneurs are provided training, tools, funding and concessions to work the mined-over areas left behind by the companies' larger machines. Trans Hex workers are on hand at these sites to provide security and operate earth-moving equipment when needed. The company processes and sells the minerals found, taking a portion of the royalties and giving the rest back to the small miners. According to the company, a number of successful small mining companies have been created out of this activity, and they continue to grow each year. However, the company information notes only a small number of artisanal individuals or groups are offered this opportunity, and it is unclear how TransHex deals with others who may try to mine in or near its property.

2.5 Key Sector Findings and Issues for Further Study

Key Sector Findings

These findings are based primarily on a review of the public information collected from the target companies, a number of brief interviews or other verbal or written exchanges with key managers at some of the target firms and with other industry experts, and supplemented with a reading of industry literature in this subject area.

- While a few mining firms in this study referenced World Bank standards in their public information, the research suggests that many exploration stage and/or junior mining companies are unfamiliar with or have little direct contact with the WBG or its guidelines. IFC involvement in a mine may not occur until the project has been transferred from an exploration company to a larger firm that specializes in production.

- Although many companies have implemented environmental and social policies and practices, there appear to be a wide range of motivations and approaches, and varying levels of commitment and effectiveness.

- Mining companies of all sizes in this research group appear to be more active in environmental than in social activities. This may in part be due to the fact that environmental issues are more quantitative and therefore easier to measure for compliance (e.g. ISO 14000, or pollution levels in air or water). There is also a greater body of solutions and best practices in circulation for environmental issues. Or, perhaps mining managers are ill-equipped to resolve what they often refer to as "non-technical" (i.e., social, community relations, health or political) problems. Whatever the explanation, more work needs to be done to develop and disseminate best practices for social and community relations policies and practices

- Research suggests that it is generally the larger mining companies and/or those with production facilities that have the most developed environmental and social programs. Because they stay longer in a region than the exploration firms, they have more contact with the local communities, and as a result are obliged to expend more effort on building good relations.

- However, the research also shows there are notable exceptions to this generalization. For example, there are large and long-established operations like Norilsk Nickel that show awareness but little progress on environmental issues, and smaller junior firms like First Point Minerals and Hunter-Dickinson that say they have incorporated environmental and social strategies into all their activities.

- Small and early stage mining firms appear to be like most other entrepreneurs. They consider themselves understaffed and under-financed, and are typically focused on the day-to-day effort of bringing their projects to profitability. With very little time or energy to spare, they need to be convinced of the direct benefit to devoting resources to what some consider to be someone else's problem. With many, it may take a combination of carrots and sticks to get and hold their attention.

- There is anecdotal evidence that governments, financial backers, and civil society have been exerting pressure on large mining producers to adopt environmentally and socially responsible approaches. This has led these companies and their financial backers to push these requirements upstream to junior partners from which they acquire projects. There appears to be a growing recognition of the need to address environmental and social issues earlier in the mining cycle, when exploration activities make their first mark on the local environment and surrounding communities.

- Once convinced (or coerced) to take a new course of action, and given their resource constraints, smaller firms will need and want exposure to guidelines, techniques and training in the practical implementation of policies. There is clearly a role for the WBG and others to play in providing these companies tools to change the way they have traditionally done business. This might include adapting the WBG environmental and social guidelines to reflect the early stage activities of exploration firms. A key consideration is the mechanism for disseminating these guidelines to the smaller firms, who may not seek them out of their own volition, due to lack of awareness or sense of urgency about social and environmental issues.

Issues for further study

As with the oil and gas sector, a desktop review of company information indicated the presence of environmental and social policies, and even provided some evidence that companies are matching words with action. Some of the companies chosen for this study, including loss-making junior exploration firms, appear to be proactive in responding to environmental and social challenges. Others appear to recognize that they will need to address these issues if they want financing or partnerships with many senior firms, but may be unsure how to make the transition. Further research involving interviews with the leaders of organizations that have successively implemented policies could provide significant insight for other firms struggling with these same issues, and may help the WBG and others understand how they can best help these companies. A number of issues which could be addressed in interviews with senior managers of the mining firms include:

- What are the drivers or disincentives for junior and/or early stage companies to adopt environmental or social policies and practices? How are they the same or different from those of larger downstream companies?

- Once a company decides that it wants or needs to adopt environmental or social strategies, how does it go about finding the resources (technical, financial, and managerial) needed to incorporate those activities into its business model?

- Are exploration stage firms aware of the WBG's role in the sector? How can the WBG help them to implement environmentally and socially responsible policies and programs?

3.0 OIL AND GAS

3.1 Sector Overview

Despite the economic downturn of the past few years, demand for oil is expected to continue growing. This growth, along with rising depletion rates of current reserves, and continuing uncertainty in Middle East politics, is expected to fuel growth of exploration activities, especially in emerging economy markets such as West Africa and Southeast Asia. Similarly, overall demand for natural gas is growing, as its low emissions make it a popular choice for meeting gradually toughening environmental standards.

There are hundreds of oil and gas exploration, production and distribution firms worldwide, although the oil & gas sector is more vertically integrated than mining. A series of mergers and acquisitions (M&A) in recent years have led to growing consolidation at the top of the oil industry and the emergence of global, vertically-integrated "majors" and "super-majors" (six firms make up 70% of the total market capitalization for publicly-owned oil companies).[5] Despite the consolidation at the top, there are still a large number of independents and other firms focused primarily on exploration and production ("E&P") activities. However the M&A activity has also had an impact on smaller players, as larger companies opt to quickly increase their reserves by acquiring small E&P firms with promising operations, in addition to doing their own exploration work.

The newly privatizing firms in emerging economies (e.g. Russia, China, Brazil, India, etc.) are playing an increasingly significant role in E&P activities globally. Indian and Chinese oil firms have recently struck deals in the Gulf Region, Middle East, and South East Asia, while Malaysia's Petronas has several projects in Africa. Brazil's Petrobras recently made a bid to acquire Argentinian producer Perez Companc, which has operations throughout Latin America.

At the E&P stage there is a large overlap between the natural gas and oil players, since most E&P firms pursue both, and oil and gas are frequently found in close proximity to each other. Where the oil and gas industries – and in some cases the players – diverge is in the production and distribution stages of the supply chain. A key trend in the natural gas industry has been the advent of long-distance transborder pipelines to transport the gas from wellheads to distribution points. These pipelines often cross one or more countries, and their impact on the natural areas and communities they traverse is an issue that has generated much discussion and disagreement among governments, the private sector and civil society.

A final point distinguishing the oil and gas industry from mining is that the former dwarfs the latter by several orders of magnitude in terms of scale of operations, measured in financial terms (revenue, assets, market capitalization, etc). While mining firms are considered "juniors" if their assets are less than $100 million, many have assets that are a tenth of that or smaller, including companies reviewed in this report. By contrast, oil & gas E&P firms that are considered "small" can easily have assets worth $100 million, or even as high as $1 billion.

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[5] Energy Intelligence Group, *EIG Top 100: Consolidation Polarization and Globalization – The New face of the Oil Industry*, 2002

3.2 Selected Target Organizations

As noted above, twenty oil and gas firms active in exploration and production activities were selected for review in this project (see Table 3.1 below). They include a mix of large and small firms based in developed and emerging country markets, and all operate in the four primary regions of interest to the EIR. Some companies are primarily E&P firms, others are integrated oil or gas firms that carry out E&P, refining, and distribution activities (including several firms involved in natural gas pipeline projects), and three are drilling and oilfield service companies hired by the producers to help assess and develop their assets.

3.3 Results and Analysis

Amount and Types of Information Provided

The type of information provided by oil & gas firms on environmental and social issues was similar to that of the mining industry (see Table 3.2 below). All but two companies provided several pages or more of environmental or social information on their Website, in Annual Reports or in other investor information.

Four companies publish stand-alone annual reports on their environmental and/or social activities. Three of the four (Nexen, Fortum, and Marubeni) are large integrated companies with downstream petrochemical and energy interests as well as exploration, production and distribution activities. The fourth one, Cairn, is a smaller U.K. E&P firm that is active in onshore and offshore activity in India and Bangladesh. Marubeni's most recent 22-page Environment Report contained little information about actual activities. Instead, the company chose to focus on a detailed explanation of how its Environmental Management System and ISO 14001 certification program operate and are being rolled out to its hundreds of divisions and subsidiaries worldwide.

Public Commitments to Environmental and Social Principles & Practices

Environment: Fourteen of the oil & gas firms had explicit policies on the environment, and all 20 had either policies, or other statements of principle addressing environmental issues (see Table 3.3 below). However eight of the companies with policies or other statements of principle provided no information on related activities, which raises the question of how their declarations of intent are matched by action. A dozen companies did provide information on their environmental activities, which was much lower than for the mining sector, where all but one firm identified environment-related programs or activities. Only two of the three drilling and oilfield services firms had environmental policies. Although the policies referenced commitments to pollution control, restoration of damage, and so forth, none of the three indicated any specific activities undertaken in the field. Since drilling contractors are often the first groups to begin work in a concession, one issue for further study would be to better understand to what extent their policies or those of the E&P firms that hire them lead these companies to implement responsible environmental and social practices.

Table 3.1 Target Oil & Gas Companies

Company	Home Office	Type	Total Assets 12/31/02 US $ Million	Resource Interest	Emerging Economy Assets & Activities
1 Marubeni Corp.*	Japan	Integrated/Diversified, including E&P, Gas Pipelines	36,100	Oil & Gas	India, Russia, Qatar
2 Devon Energy	USA	E&P	16,225	Oil & Gas	Azerbaijan, China, Brazil, Ghana, Gabon, Congo
3 Technip-Coflexip	France	Drilling & Oilfield Services	11,118	Oil & Gas	Angola, Brazil, Asia-Pacific
4 Fortum*	Finland	Integrated	9,059	Oil & Gas	Russia
5 China National Offshore Oil Corp (CNOOC)	China	Offshore E&P	7,390	Oil & Gas	China
6 Tatneft*	Russia	E&P	7,128 (6/30/02)	Oil & Gas	Russia
7 Nexen	Canada	E&P	4,291	Oil & Gas	Nigeria, Australia, Colombia, Trinidad
8 Santos*	Australia	E&P, gas pipelines	3,006	Oil & Gas	Papua New Guinea, Indonesia
9 Petroleum Geo-Services	Norway	Drilling & Oilfield Services	2,962	Oil & Gas	W. Africa, South America, SE Asia, Arabian Gulf
10 Reliance*	India	Diversified/ Integrated	2,454 (3/31/03)	Focus on Gas E&P	India
11 Newfield Exploration	USA	E&P	2,315	Oil & Gas	China
12 Helmerich & Payne	USA	Drilling & Oilfield Services	1,227 (9/30/02)	Oil & Gas	Latin America, Equatorial Guinea
13 OilSearch Ltd.*	Papua New Guinea	E&P, Gas Pipelines	1,197	Oil & Gas	Papua New Guinea
14 PT Medco Energi	Indonesia	E&P	753	Oil & gas	Indonesia
15 Cairn Energy*	UK	E&P	534	Oil & Gas	Bangladesh, India
16 Novus Petroleum Ltd.*	Australia	E&P	341	Focus on Gas E&P	Indonesia, Oman, Pakistan, Philippines, Qatar, Thailand
17 Dana Petroleum	UK	E&P	220	Oil & Gas	Russia, Mauritania, Ghana
18 Ramco Energy	UK	E&P, Oilfield Services	116	Oil & Gas	Czech Rep., Montenegro, Poland, Bulgaria
19 Emerald Energy	UK	E&P	47 (6/30/02)	Oil & Gas	Colombia, Argentina
20 Perenco	France	E&P	Undisclosed (privately held)	Oil & Gas	Cameroon, DR Congo, Congo Rep, Eritrea, Venezuela, Guatemala, Colombia

***** = Significant or majority natural gas-related activities

Table 3.2 Level of Public Information Provided on Environmental and Social issues

Level of Public Information Provided	No. of Companies
No information provided on Website, in Annual Report, press releases, investor presentations, or other company public information	0
Single reference (1 sentence to 1 page)	2
Multiple references (2-5 pages)	12
Significant amount of information (>5 pages)	3
Stand-alone Environmental and/or Social Reports	4

Note: Total number of companies is 20. Some are counted in more than one category.

Health & Safety: Health and safety concerns appeared slightly more often in the information provided by the oil and gas companies than was the case in the mining sector. Sixteen oil & gas companies (vs. 14 mining firms) had some form of policy or statement of principle, while thirteen oil & gas companies had explicit policies (vs. only four mining companies). As with the mining sector environment, health and safety matters are often grouped together in EH&S programs, but it is unclear from the findings of this study if there is a higher premium placed on safety in the oil & gas sector than in the mining industry.

Social Development/Community Relations: Far fewer oil & gas companies had explicit social policies than had environmental or health & safety policies. Although over three-quarters of the firms had other statements of principle concerning social or community relations, only half of the oil & gas companies actually identified social activities. If the level of reporting reflects the level of actual activity, then participation in social or community relations programs is lower in the oil & gas sector than in mining. This may be due to the fact that unlike the mining industry, where almost all activities take place inland, a large portion of oil & gas E&P operations in developing countries take place offshore, so there may be less impact on or interaction with local communities.

Table 3.3 Public Commitments by Oil & Gas Companies

Public Commitments	Environment	Health & Safety	Social and/or Community Relations
Has explicit Policies	14	13	5
Has either Policy, statement, or both	20	17	12
Has neither Policy nor statement	0	3	8
Principles included in corporate Mission, Vision, or Strategy statements	6	3	4
Programs and Activities	12	11	10

Note: Total number of companies is 20. Some are counted in more than one category.

Standards of Practice

Nearly half of the group reported that they seek to meet local standards for environmental, health, and safety activities (see Table 3.4 below). Four cited their home country standards, while a half-dozen professed a desire to meet "international" standards without giving any indication of specific benchmarks. A similar number identified recognized national standards (e.g. Australia, Canada), intergovernmental initiatives such as the United Nations Global Compact, or industry guidelines such as those created or endorsed by the U.S. American Petroleum Institute (API), the International Petroleum Industry Environmental Conservation Association (IPIECA), or others. No oil and gas firms mentioned World Bank Group standards or guidelines as their reference points. Five companies appear to have adopted a proactive approach, continuously seeking to improve performance and expand their programs.

Table 3.4 Standards of Practice cited by Oil & Gas E&P Companies

Standards of practice cited by companies	No. of Companies	Comments
Local Standards	10	Varies by country
Home office country standards	4	Australia, Canadian, U.K., Scandinavian laws or standards cited
Recognized international standards	6	EU, UN Global Compact, World Business Council for Sustainable Development, IPIECA, API standards or practices cited
Unspecified "international" or "world class" standards	6	No details provided on specific benchmarks
World Bank Guidelines	0	No references to WBG cited in oil & gas firm public information
Sets own standards, actively seeks best practices	5	Proactive approaches to exceeding requirements

Note: Total number of companies is 20. Some are counted in more than one category.

Policy Comparison with WBG Guidelines

As with the mining firms, oil & gas firm environmental and social policies–where they were available–were generally less than a page long, and limited to general statements of principle. As such, it was difficult to compare them with the WBG guidelines. About a third of the companies indicated they had completed some form of environmental assessment, including Scottish E&P firm Cairn Energy, which noted that it had carried out five EIAs and 11 other environmental studies in 2001 to support its E&P and development activities. Four of the companies noted they respected cultural property and/or the rights of indigenous people, without giving any specifics.

Other Indicators

Other indicators of oil & gas companies' environmental and social commitments found in their public information are shown in Table 3.5 below.

Dedicated Board/Senior Management Responsibilities: Roughly a third of the companies have senior staff with environmental management responsibilities. Marubeni's annual environment report described a vast network of environmental managers, including a Director of Environmental Affairs who reports directly to Marubeni's President, a Global Environmental

Table 3.5 Other Indicators

Category	Indicator	No. of Companies Reporting
Strategic Oversight & Management Systems	Board Committees with explicit Environmental oversight responsibility	4*
	Board Committees with explicit Social/Community Relations oversight responsibility	1
	Senior Management with explicit Environmental Title/Responsibility	7
	Senior Management with explicit Social/Community Relations Title/ Responsibility	3
	Has implemented Environmental Management Plans	1
	Has implemented Environmental Management Systems	8
	Applies continuous improvement management techniques to environmental activities	7
	Requires contractors, suppliers and/or JV partners to follow company environmental or social policies & practices	13
Performance Audits & Verification	Internal Audits (primarily Environment, Health & Safety)	12
	Outside Audits (primarily Environment, Health & Safety)	6
Certifications and Awards	ISO 14000 Series Certification (Environmental Management Standard)	2
	ISO 9000 Series Certification (Quality Standard)	3
	Has received other environmental, community, best practice, etc. awards (from governments, industry associations, other organizations)	6
	Included in "green" or socially responsible Stock Index (e.g. Dow Jones Sustainability Index, FTSE4Good Global 100, etc.)	2

* Includes two firms where the entire Board is charged with regular consideration of environmental issues.

Preservation Committee which provides high-level policy and planning input, a Global Environment and ISO unit, and teams of environmental auditors and managers within each company division. As with the mining sector, a smaller number of oil & gas firms report having Board committees or senior staff with dedicated social/community relations responsibilities than say they have dedicated environmental responsibilities.

Management Systems: Nearly two thirds of the companies say they require their contractors to follow their environmental and safety policies or guidelines. This is a higher number than for the mining companies reviewed for this study, of whom less than a quarter said they did so.

Performance Audits: Just over half of the companies conduct internal audits of their environmental performance, but only six have outside auditors come in, including audits conducted as part of ISO 14000 recertification processes. And most of those are the companies which have downstream operations such as production and petrochemicals.

Awards & Certifications: Similarly, while two companies had received ISO 14000 series certifications, both were for downstream activities in refining, engineering and other facilities. Marubeni has obtained ISO 14000 series certifications for 55 of its facilities, including head offices, branches and overseas subsidiaries. There was no indication that its oil & gas business was included in that group, although the company plans to certify all its facilities within the next few years. Similarly, three firms have obtained ISO 9000 series certifications, although none appears to be specifically related to E&P activities. One of the oilfield service companies, Technip-Coflexip, certified its engineering centers, E&P firm Ramco has had its pipeline services subsidiary certified, and integrated Indian producer Reliance has 29 ISO 9000 certificates, but all for its petrochemical plants. A number of companies had won national and association awards for quality or environmental performance. Two firms (Marubeni and Nexen) said they are included on the Dow Jones Sustainability Index, which tracks a stock portfolio of companies chosen for their efforts to follow sustainable or triple bottom line business practices.

Environmental Activities

As with mining companies, typical environmental activities described by the oil & gas companies varied based on the stage of various projects:

- Several firms indicated work completed on environmental impact assessments or other environmental studies for new E&P and development activities

- Companies with operational oil and gas production facilities, as well as downstream refineries, largely described efforts to monitor emissions and energy efficiency, pollution prevention measures, etc. In most cases these activities are described within the context of Environment or EH&S Management Systems, Plans or Strategies that have identified performance targets to be met.

- Several of the large integrated companies involved in both upstream exploration and downstream distribution participate in some of the new public/private climate change and emissions trading programs (e.g. the World Bank's Carbon Fund) that have been created in response to global warming. Finland's Fortum has set up a Climate Fund to invest in "clean

development mechanisms" (including the Carbon Fund), while Marubeni has invested in EBRD's Green Fund.

- Similarly, some companies cited their participation in industry association and public/private efforts to improve industry environmental and safety practices, such as the American Petroleum Institute' Safety and Environment Program (SEMP), or the work being carried out in this area by the environment-focused oil & gas industry association, IPIECA.

- Nexen, an integrated Canadian firm described prairie conservation and other wildlife habitat protection activities it has undertaken on some of its properties in Western Canada. The cover of the company's 2001 Safety, Environment and Social Responsibility report features a picture of hawks that have built a nest on a tower at one of its Canadian gas plants.

- A number of companies describe activities or expenditures on government-mandated clean-up of current or former oilfields and refineries in North America, Russia, Indonesia, etc.

Health & Safety Activities

Closely tied to the environmental programs, much of the health and safety activities described by the oil & gas firms involve implementation and monitoring of safety plans and systems for offshore and onshore operations, as well as in downstream refining and petrochemical facilities.

Social/Community Relations Activities

While there was generally less information provided overall about programs and activities involving the surrounding communities, it paralleled many of the activities described by mining companies.

- One E&P firm, Cairn, described its efforts to meet with communities in India prior to beginning onshore projects nearby.

- Cairn also described infrastructure improvements it had made, including road improvements, increasing shore access for fishing, and electrification and irrigation projects.

- A number of companies provide support for local health and education facilities, including a number of scholarship programs to train local resident in engineering and other technical disciplines.

- Several companies participate in reforestation or restoration of archaeological sites near their operations.

- Several firms also mentioned support for small business activities, including helping to start tree nurseries and hatcheries, community agriculture programs, etc.

- Many companies also participate in more traditional charitable or philanthropic giving programs, where companies and their employees donate food, clothing, computers, labor, etc. to help with earthquake and disaster relief, or to help orphanages, schools, hospital blood drives, etc.

3.4. Selected Case Studies

Cairn Energy PLC

Scottish E&P firm Cairn Energy PLC, which has several producing oil fields in India and exploration interests in Bangladesh, was the only independent, non-integrated, E&P-focused oil & gas firm that indicated any significant level of interaction with local communities. It publishes an annual *Environmental and Social Review,* has a Health, Safety and Environment Policy, and a Corporate Social Responsibility Policy, which includes a section on respecting and assisting local communities. In the employment section of its website, the firm cites the importance of social responsibility, and of having a positive impact on communities as key employee values. And yet, Cairn's public documents highlight a key finding of this study: extractive companies devote more attention to environmental issues than to social ones, in part because they are so much easier to quantify and show improvements. In the *Environmental and Social Review,* eight pages are devoted to describing environmental and safety performance, complete with data on emissions, energy consumption, waste generation, pollution prevention, etc., all compared to past year scores or industry benchmarks. By contrast, only one page of the report is devoted to social "performance," essentially a list of community-related activities for the year. The activities are laudable: infrastructure improvements, strengthening of local educational and medical facilities, etc. The company also completed a social needs assessment in the communities surrounding a site in Bangladesh that is not yet in production, demonstrating a proactive rather than reactive approach to community relations. But the fact that the only metric shown for these activities was the amount of money spent on them suggests that extractive companies face challenges in measuring the impact of such activities on communities, and in showing the value of such programs to the company and its shareholders.

Nexen, Inc.

Canadian integrated oil, gas and chemicals company Nexen appears to be one of the most proactive oil & gas companies within the group reviewed for this study, in terms of policies, practices and reporting on social and environmental activities. The company publishes an annual *Safety Environment and Social Responsibility (SESR) Review,* which describes its 11-point SESR management system, and reports on extensive environmental and safety procedures. The company also says it has developed a unique approach for managing both investment risk and the indirect impacts associated with conflict, which is a key issue for Nexen operations in Yemen, Colombia, and Nigeria. For each of its investments, the company conducts an "Above Ground Issues Review," which analyzes socio-economic, political, and commercial risks, using internal and external information sources, and extensive consultations and interviews with government officials, businesses, NGOs and community representatives. The interviews are conducted by outside experts in the areas of SESR, Security and Government Relations, rather than local staff, to get a broad perspective on local issues. This provides the basis for creating community affairs programs, which the company says allow it to operate successfully in zones of conflict. Nexen says it supports communities' rights to participate in decisions affecting them, and to share in benefits from oil & gas development, and that its insistence on good ethical business practices has been a key to its success in these areas.

3.5. Key Sector Findings and Issues for Further Study

Key Sector Findings

The following findings are derived primarily from a review of the information provided by the 20 oil and gas firms included in this study, however they are also informed by discussion with industry experts, and a review of industry literature in this subject.

- As noted earlier, none of the oil & gas E&P firms cited WBG standards or guidelines for any of their environmental and social activities, although a number cited more general "corporate

responsibility"-oriented guidelines developed by industry associations like IPIECA and API. It is unclear from the research if there is lack of awareness concerning the WBG's role and resources in this area, or if there are other reasons why the WBG appears to have such a low profile within this group.

- Based on information provided by the companies themselves, the companies with large, permanent downstream facilities, such as refineries or petrochemical plants, or which were based in their countries of operation, such as Oil Search in Papua New Guinea, Indonesia's PT Medco Energi, or Russian firm Tatneft, appear to have the most active and diverse array of environmental, health and safety and social activities.

- As noted above, many of these integrated firms have set up environmental management systems and appear to be devoting considerable energy to monitoring and improving a variety of environmental and safety performance metrics. However, the focus of their efforts is in their downstream facilities, and little information is provided about environmental activities in their upstream E&P operations

- Similarly, a number of the larger European, North American, Japanese and Australian firms describe environmental and social activities carried out in their home countries, but provide little detail about their overseas operations. For example, Australian producer Santos has a considerable amount of environmental and social information on its website. This includes downloadable informational posters on identifying rare plants and animals, and handbooks for dealing with environmental issues, protecting ecosystems, and respecting Aboriginal cultural artifacts in Australia. However it is unclear from its public information if the company applies a similar level of effort with its operations in Papua New Guinea or Indonesia

- The majority of social and community activities described by the firms took the form of traditional charitable or philanthropic donations, rather than community development programs. It is unclear how much two-way interaction occurs between the oil & gas firms and the surrounding communities.

- While this study included a number of companies that have significant interests in the natural gas business, the focus was on companies active in upstream E&P operations. A number of the firms included in this review are involved in pipeline projects (e.g. Santos and Oil Search in Indonesia), however they are often junior, non-operating partners to the oil majors who provide the bulk of the financing and operational management for these initiatives. This minor role in the pipelines was reflected in the information provided about them. Where mentioned at all, accounts were limited to minimal reporting on the operating partner's most recent activities on the project. As a result, this research effort did not explore in any depth the environmental and social activities—or the controversies – that accompany these projects, since there was little information provided on them by the selected E&P firms.

Issues for Further Study

This review of public information provided by oil & gas firms with stated environmental and social policies and practices provides an indication of how some firms in the industry are incorporating these issues into their operations. But the public information they provided does

not reveal the motivation behind some of these efforts, and it is more opaque on the specifics of what is being done at the earliest stages of E&P projects. A number of key issues merit further study, and could be addressed by interviews with key managers at these companies. Many of them are similar to the issues found in the mining sector.

- What are the drivers that prompt oil & gas firms, especially at the exploration end of the pipeline, to implement environmental and social policies?

- Unlike the mining industry, where a potential resource is often identified by an exploration firm, and then sold to a larger company that specializes in mining production, control of an oil or gas project often rests in the hands of one company from beginning to end. In theory that suggests that it would be easier to create and implement a comprehensive "cradle to grave" environmental strategy for individual projects. And yet much of the environmental activities described by the companies in this study appear narrowly focused on one or two downstream stages of the process. Why is this so, and how would one go about putting in place such an end-to-end strategy that starts when a company gains access to a new concession?

- On a related point, drilling and oilfield service firms do much of the initial surveying and drilling work to prove out a potential concession, as well as being integrally involved throughout the production cycle under contract to the firms that actually own the resource. Often the first ones "on site", what environmental and social challenges and responsibilities do these companies face, both on their own account, and as agents for the firms that hire them?

- The variety of projects encountered in the oil & gas business, beginning with onshore vs. offshore E&P, to oil refineries and transcontinental gas pipelines, suggest that the array of environmental and social issues a single company can encounter is extensive, perhaps more so than for mining firms. How does a company adopt strategies to proactively address this multitude of challenges?

- Once a company has decided to become proactive about these issues where can it go for technical, financial, and managerial resources to help it incorporate them into its business model? Some industry associations have been doing work in this area, how well known are they to the majority of E&P firms? And their guidelines are voluntary, and often very general in terms of what is demanded of a firm.

- How aware are oil & gas E&P firms of the WBG's initiatives in this field. What role could the WBG play in helping them meet the challenges noted above?

4.0 PRIVATE FINANCIAL PARTNERS

4.1 Sector Overview

A large number of private banks, venture capital funds and other investment firms participate in financing the extractive industries.

Much of project finance for upstream mining oil and gas exploration comes from the large U.S. and European financial service firms, although there is also significant participation from Canadian, Japanese, and Australian banks. There is both competition and collaboration, especially for risk-sharing on large projects in developing countries. While the level of financial participation in mining projects has fallen off somewhat in recent years, reflecting industry cycles, these banks have played a key role in the recent flurry of merger and acquisitions which have led to growing consolidation among the world's top mining firms. Bank participation in oil and gas deals is also tied to industry cycles, although one growth area is in natural gas processing and pipeline projects, which reflects the growing interest in natural gas as a relatively "environmentally-friendly" energy resource. Consolidation among the top oil majors and related vertical integration plays are also creating keeping banks busy in this sector.

The private equity market is also an important source of capital for extractive industries. This capital is typically raised by venture capital funds, privately held partnerships that raise money from institutional investors, endowments, and high net worth families and individuals for investing in high risk/high return projects. These groups and individuals represent a significant source of funding. One firm reviewed for this study estimates that the total amount of funds raised for all types of business ventures (not just extractive projects) by U.S. private equity limited partnerships was over $150 billion in 2000. Although it is hard to gauge the amount of private equity flowing into extractive investments, in mining it is generally considered to have peaked in the mid-1990s, and then fallen, due to downward cycles in the mining industry and competition for venture capital from the booming high tech industry.[6]

Private equity funds often focus on one industry, e.g. oil & gas or mining (but not both) and will have expert managers or consultants (often former extractive company engineers or managers) who provide advice and guidance to the companies in its investment portfolio. This private equity can be especially important for mining exploration and development-stage projects. At that point in the mining cycle, companies may have exhausted their initial sources of capital on evaluating a potential finding, but need additional resources to move to the point where they have a "bankable" project with a strong potential income stream against which they can get project finance loans. The VC partnerships and other types of equity funds typically invest several million dollars in a mining company or project. They also sit on the exploration company's board and provide management oversight and technical expertise.

[6] MacDonald.

The Equator Principles

A growing number of private financial partners, most notably the large banks involved in project finance, are incorporating environmental and social guidelines into their financing criteria. This trend gained significant momentum with the June 2003 announcement by ten leading banks from seven countries of their adoption of the "Equator Principles." The signatories include ABN Amro Bank, N.V., Barclays PLC, Citigroup, Inc., Credit Lyonnais, Credit Suisse Group, HVB Group, Rabobank, Royal Bank of Scotland, WestLB AG, and Westpac Banking Corp.

This move, which occurred subsequent to the completion of research for this project, codifies a voluntary set of guidelines for managing social and environmental issues related to the financing of development projects. These principles were developed by the banks, working in conjunction with the IFC, and they are based on World Bank and IFC environmental and social policies and guidelines. They are applicable to project financing activities in all sectors, including mining, and oil & gas projects.

Under the principles, the banks commit to using the IFC's environmental and social screening process, which categorizes projects as A, B or C (corresponding to high, medium or low environmental or social risk, and described more fully in Section 5.0 of this report). For Category A and B projects, banks will require detailed Environmental Assessments, modeled on existing IFC criteria, and including–where necessary–Environmental Management Plans which address mitigation and monitoring of environmental and social risks.

Significantly, under the terms of the Principles, the banks agree to "not provide loans directly to projects where the borrower will not or is unable to comply with our environmental and social policies and practices."[7] In addition, the banks agree to include covenants in their loan conditions to ensure that if environmental and social management plans are not followed and problems not remedied by borrowers, the banks will have the ability to declare the loans in default. Thus financial partners adopting these principles will have potential leverage in both the project design and execution phases to encourage borrower compliance with WBG environmental and social standards. These banks represent 30 percent of the loan syndication market, underwriting approximately $14.5 billion worth of project loans in 2002 (for all sectors, not just extractive projects), according to Dealogic, a firm which tracks project finance statistics.[8] Their commitment to these principles could serve to accelerate the adoption of environmental and social lending criteria by other financial partners.

Two of the financial partners included in this research project, Barclays PLC and the HVB Group, are among the ten banks that adopted these principles. This is not surprising, in that these two banks were among the most proactive financial partners on social and environmental issues out of the 15 reviewed in this study. As noted elsewhere in this report, these two banks have a history of taking the lead on these issues, and are developing and adopting best practices that can serve as models to others.

The new Equator Principles and their signatories are not without their critics. Citibank has come under heavy criticism for its involvement with Enron, and has been a target of NGOs for some of the projects it has financed in developing countries. As reported by Reuters, the Rainforest Action Network, which has run television ads in the United States criticizing Citibank's environmental practices, also criticized the new Equator Principles as having "loopholes" and as not having sufficient mechanisms to monitor borrowers' practices. "We're not seeing the most ecologically endangered areas pulled off-limits for investment and mega-development projects," said Ilyse Hogue, RAN's global finance campaign director, in a Reuters interview.[9]

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[7] IFC and ten private banks, *Equator Principles*, viewed on 6/09/03 at http://equatorprinciples.ifc.org.

[8] "Leading Banks Adopt Equator Principles," IFC press release, June 4, 2003, viewed on 6/09/03 at http://equatorprinciples.ifc.org

[9] Jonathan Stempel, "Banks to Adopt Environmental Rules Amid Opposition," Reuters newswire, June 3, 2003.

4.2 Selected Target Organizations

Fifteen private financial partners active in financing extractive projects were selected for review in this project (see Table 4.1 below). They include a mix of large multinational investment banks and smaller sector-specific investment banks, private equity funds and venture capital firms.

The large investment banks provide a wide range of debt and equity funding and financial advisory services to the extractive and other industries, including project finance, balance sheet lending, and assistance with mergers and acquisitions (M&A). Most are largely into funding downstream operations, e.g. refineries, GTL (gas liquification) plants, pipelines, etc, but they also finance upstream activities, including some production and exploration activities. The

Table 4.1 Selected Private Financial Partners

Company	Home Office	Type of Institution[10]	Total Assets 12/31/02 US$ Billion)	Extractive Sector Lending
1 Bank of Tokyo-Mitsubishi	Japan	Investment Bank	827.6* (3/31/03)	Mining, Oil & Gas
2 JP Morgan	USA	Investment Bank	758.8	Mining, Oil & Gas
3 HypovereinBank (HVB)	Germany	Investment Bank	724.5	Mining, Oil & Gas
4 Barclays Capital	UK	Investment Bank	646.7	Mining, Oil & Gas
5 Société Générale	France	Investment Bank	525.5	Mining, Oil & Gas
6 CIBC	Canada	Investment Bank	175.4 (10/31/02)	Mining, Oil & Gas
7 Standard Bank	South Africa	Investment Bank	45.3	Mining. Oil & Gas
8 ABSA Bank	South Africa	Investment Bank	31.3	Mining
9 Macquarie Bank	Australia	Investment Bank	18.4	Mining
10 Lion Selection Group	Australia	Mining Venture Capital Fund	0.1	Mining (focus on Juniors)
11 African Lion Ltd.	South Africa	Mining Venture Capital Fund	Undisclosed (privately held)	Mining (focus on Juniors)
12 IBK Capital	Canada	Mining-focused Investment bank	Undisclosed (privately held)	Mining
13 Lion Mining Finance	UK	Mining venture capital	Undisclosed (privately held)	Mining (focus on Juniors)
14 Resource Capital Funds	USA	Mining Venture Capital	Undisclosed (privately held)	Mining (focus on Juniors)
15 Simmons & Company International	USA	Oil & Gas-focused Investment Bank	Undisclosed (privately held)	Oil & Gas

* Includes combined results of Bank of Tokyo Mitsubishi and Mitsubishi Trust & Banking Corp.

[10] While extractive firms typically deal with the investment arm of these firms, all the large Banks shown here are full service banks, offering commercial, investment, and retail banking as well as other financial services.

smaller sector-specific investment banks and equity funds typically provide a narrower range of services, including early stage financing and advisory services for the exploration, development and production activities of junior mining firms and smaller oil & gas firms.

The scale of the financial transactions varies widely. The smallest firms, junior mining financiers like African Lion or Resource Capital, typically invest several million dollars in a company, while it is not uncommon for the largest banks, such as JPMorgan or HypovereinBank (HVB), to arrange multibillion dollar transactions.

4.3 Results and Analysis

Data gathering and analysis of private financial partners fell into two main categories: the firms' corporate-level environmental and social commitments and practices, and their sector-level approach to incorporating environmental and social considerations in their extractive sector financing activities, including risk analysis, lending criteria, etc.

4.3.1 Corporate-Wide Polices and Practices

Amount and Types of Information Provided

The amount and type of environmental and social information provided by the financial players varied more widely than for the extractive companies, reflecting the broader diversity of financial partners chosen (See Table 4.2). Generally speaking, the smaller, privately held firms provided the least amount of information, although all but one had websites. The largest banks provided the most amount of information, including four which provide annual public reporting on environmental and/or social issues. Two, Absa Bank and Société Générale include 3-5 page Social or Sustainability reports in their Annual Reports, while Barclays Bank and HVB Group produce lengthy standalone reports (HVB's 2001 report is 99 pages long).

Typically, most environmental and social information supplied by banks speaks to broad corporate-level policies, principals or activities. Although there were some notable exceptions, most firms provided little information on environmental or social criteria that are applied to

Table 4.2 Level of Public Information Provided on Environmental and Social issues

Level of Public Information provided	No. of Companies
No information provided on Website, in Annual Report, press releases, investor presentations, or other company public information	4
Single reference (1 sentence to 1 page)	4
Multiple references (2-5 pages)	3
Significant amount of information (>5 pages)	2
Stand-alone Environmental and/or Social Reports	4

Note: Total number of companies is 15. Some are included in more than one category.

clients seeking equity or debt financing. Because understanding the banks' lending criteria was deemed important to the research, efforts were made to contact a number of the target firms ask for additional information. So in addition to publicly available information, nine companies, including four big banks and five small private equity firms, provided additional information via email or in brief telephone exchanges, which is discussed later in this section under Extractive Sector Financing activities.

Corporate-Level Public Commitments to Environmental and Social Principles & Practices

Environment: Unlike the extractive sector, financial partners tended to provide more information about their corporate-level social or community relations activities than environmental matters. Note that extractive sector-specific environmental matters (such as lending criteria) are dealt with separately later in this section. Only three firms, all large banks, said they have explicit corporate-level environmental policies (although only one provided the actual policy on its website at the time research was carried out for this project). Nearly two-thirds of the firms indicated their commitment to environmental issues via a policy or other statement, although none addressed the environment in their corporate mission and vision statements. This may be because while interaction with the natural world is very direct and central to the activities of an extractive company, it is a more diffuse and indirect issue for a service firms such as banks or venture capital funds.

Health & Safety: Similarly, there was a very low level of reporting on health and safety commitments or activities, mostly relating to staff HIV/AIDS awareness initiatives

Social Development/Community Relations: Nearly all the large banks had either a policy or other statement of principle regarding the firm's commitment to community relations. Given the fact that most of these banks have extensive consumer banking businesses in addition to their commercial and investment banking activities, this is not surprising. Competition for consumer accounts makes them very attentive to their image in the community.

Table 4.3 Public Commitments by Private Financial Partners

Public Commitments	Environment	Health & Safety	Social and/or Community Relations
Has explicit Policies	3	1	1
Has either Policy, statement, or both	9	2	10
No public indications of Policies or statements	6	13	5
Principles included in corporate Mission, Vision, or Strategy statements	0	0	2
Programs and Activities	5	4	8

Note: Total number of companies is 15. Some are included in more than one category.

Corporate-Level Standards of Practice

Given the small number of firms which reported having environmental or social policies or activities, it is not surprising that few indicated an accompanying benchmark, and most that did focused on reporting guidelines (see Table 4.4). Absa Bank's efforts to implement "integrated sustainability reporting" are driven by South African government reporting requirements. Société Générale and HVB Group indicated they are signatories of the United Nations Environmental Programme's *Statement by Financial Institutions on the Environment and Sustainable Development* ("UNEP FI"), a set of environmental sustainability principles for financial institutions. HVB and Barclay have adopted the corporate social responsibility reporting model developed by the Global Reporting Initiative (GRI).

Other Corporate-Level Indicators

Other indicators of private financial partners' corporate-level environmental and social commitments found in their public information are shown in Table 4.5 below. Virtually all the firms which provided information in these categories were the large banks.

Dedicated Board/Senior Management Responsibilities

Three banks indicated that their Boards have explicit responsibility for environmental or community relations issues. The Risk Committee of Barclays' Board looks at environmental risk, HVB's entire board is charged with sustainability issues (which encompass environmental and social matters), and JPMorgan's entire Board reviews its "community-oriented activities." Barclays has a Chief Administrative Officer responsible for environmental management, who interacts with an Environmental Steering Group, Group Environmental Managers, and an Environmental Risk Management Unit. HVB has a Sustainability Management team which reports directly to the Board and provides corporate-wide coordination of all environmental and social strategies and activities.

Table 4.4 Corporate-Level Environmental and Social Standard of Practice Cited By Private Financial Partners

Standards of practice cited by companies	No. of Companies	Comments
Local Standards	NA	
Home office country standards	1	South Africa
Recognized international standards	2	UNEP FI, GRI
Unspecified "international" or "world class" standards	1	No details provided on specific benchmarks
World Bank Guidelines	NA	WBG guidelines not referenced for corporate-level benchmarks
Sets own standards, actively seeks best practices	3	Proactive approaches to exceeding requirements

Note: Total number of companies is 15. Some are included in more than one category.

Table 4.5 Other Corporate-Level Indicators

Category	Indicator	No. of Companies Reporting
Strategic Oversight & Management Systems	Board Committees with explicit Environmental oversight responsibility	2
	Board Committees with explicit Social/Community Relations oversight responsibility	2
	Senior Management with explicit Environmental Title/Responsibility	2
	Senior Management with explicit Social/Community Relations Title/ Responsibility	1
	Has implemented Environmental Management Systems	3
	Includes environmental and/or social risk as part of corporate risk management strategies and practices	4
	Has dedicated risk management unit	3
	Applies continuous improvement management techniques to environmental activities	4
Performance Audits & Verification	Internal Audits	1
	Outside Audits	1
Certifications and Awards	ISO 14000 Series Certification (Environmental Management Standard)	0
	ISO 9000 Series Certification (Quality Standard)	0
	Has received other environmental, community, best practice, etc. awards (from governments, industry associations, other organizations)	2
	Included in "green" or socially responsible Stock Indexes (e.g. Dow Jones Sustainability Index, FTSE4Good Global 100, etc.)	5

Note: Total number of companies is 15. Some are included in more than one category.

Management Systems

Several of the large banks have implemented Environmental Management Systems (EMSs), including Société Générale and Barclays, which says it models its system on the ISO 14000 standard for environmental management systems (although it was unclear if there were plans to obtain a formal certification). Barclays' 2001 *Social and Environmental Report* noted its EMS was initially implemented in its U.K. offices, then rolled out to several European countries, with plans to roll it out in Africa and elsewhere. HVB noted that its EMS, already in place for several years, has been expanded to become a Sustainability Management System, incorporating social benchmarks as well as environmental ones.

Barclays, Canada's CIBC, HVB and Société Générale now include environmental risk in their risk management polices and procedures. This includes direct risks (environmental risks incurred by the bank through its operations–pollution, unsafe facilities, etc.) as well as indirect risks (legal, financial and other consequences of environmental problems incurred by its customers, e.g. a cyanide leak at a mine). Barclays, HVB and Société Générale also have set up dedicated environmental or sustainability Risk Management Units.

As might be expected, these same three banks, along with JPMorgan, stress continuous improvement as a key part of their management strategies. Barclays, HVB, and Société Générale all describe how their environmental and other sustainability metrics are reviewed, improved, and expanded on a yearly basis.

Performance Audits

Unlike the extractive industries, where discrete environmental metrics and regulatory requirements lend themselves to auditing activities, very few of the financial partners said they conducted formal corporate-level audits for environmental or social activities. Barclays noted that it had begun an effort to catalog environmental regulations worldwide, so as to track company compliance, and it commissioned PriceWaterhouseCoopers to conduct an independent audit of its annual *Social and Environmental Report*.

Awards & Certifications

As noted above, only one bank said it bases its environmental management system on the ISO 14000 standard. While nearly all large banks had extensive information on industry awards, "league tables" and other rankings for their deal-making activities, only two (Absa and HVB) said they had received national or international corporate social responsibility ratings or sustainability awards. However five banks said they were included on one or more socially responsible stock indexes, including the Dow Jones Sustainability Indexes, FTSE4Good, ASPI eurozone, etc.

Environmental Activities

At the corporate level, the financial sectors firms' environmental activities revolve around several common areas:

- Defining, implementing, and continuously improving the environmental management systems, including the risk management and lending criteria

- Implementing "green" office practices, including recycling, energy conservation, purchasing guidelines, waste disposal, business travel practices, "green" building designs for new office space, etc.

- Offering environmentally friendly financial products, including special lending facilities to fund projects that use renewable energy technologies, revitalize polluted sites, etc. Several of the banks also offer "Green" personal investment options, such as mutual funds based on the Dow Jones or FTSE sustainability indices.

- Donations for land conservation, preservation of cultural sites of historical or archaeological importance

The above activities apply to the full service banks, most of the smaller players reviewed for this project focused their environmental attention on their clients' projects, as discussed later in this section.

Health & Safety Activities

As noted above, corporate health and safety activities were focused on HIV/AIDS awareness and education.

Social/Community Relations Activities

Community activities undertaken by the large banks, primarily in their home countries or in cities where they had major branches, include a range of traditional philanthropic activities, such as educational scholarships, youth programs, sponsorship of sports, cultural and fine arts events, employee volunteering and mentoring programs, blood drives, etc.

4.3.2 Extractive Sector Financing Practices

Sector-Specific Financing Criteria

Beyond a financial player's corporate-level commitment to environmental and social concerns, a key area of interest to this study was the extent to which project financing in the extractive sector comes with any environmental or social conditionalities. Very few of the firms reviewed in this project chose to disclose information on this topic in their public information during the research phase of this project, although some banks have since added materials on such policies to their corporate Websites. Only four of the large banks (Barclays, CIBC, HVB and Société Générale) do explicitly indicate publicly that they include environmental risks in their lending criteria, without providing additional specifics. As noted earlier, a number of the financial partners were contacted and asked to provide additional information on this topic, bending slightly the definition of what is "public" information in this study. Much of the data in the following two tables and related discussion come from those exchanges.

Subsequent to the completion of this report, two of the banks, Barclays and HVB Group, formally announced in June that they would adopt the Equator Principles, IFC-derived social and environmental guidelines for project financing in developing countries, which are described more fully elsewhere in this report. The following analysis largely reflects the policies and practices as described by those firms and others prior to the June announcement.

As can be seen in Table 4.6, 12 of the 15 companies reviewed for this study apply some kind of environmental criteria to extractive projects. Four indicated only that environmental risk was considered across all types of project financing, while the others noted they had mining sector-specific criteria they applied. One of the banks provided an outline of its internal project evaluation form, which included such categories such as environmental management issues (including whether government approved environmental management plan reports had been

written, permits obtained, estimated rehabilitation costs (and whether reserves had been set aside for that purpose) and local or regional social impacts.

A number of the smaller firms which provide equity to exploration stage junior miners said they do not have formal written policies or guidelines which they apply to projects. Rather they say they rely on their own experience and good judgment to recognize potential environmental issues, and persuade the clients to adopt responsible practices. In addition, because they are providing risk capital, the relationship may be more hands-on and long-term than the larger banks, which are transaction-focused.

The four financial partners which indicated they included social criteria in their evaluation process were two large banks which had specific (but unspecified) criteria, and two smaller firms that used informal approaches to ensure socially responsible practices in the projects they financed.

Table 4.6 Extractive Sector Environmental or Social Financing Criteria

Public Commitments	Environment	Social and/or Community Relations
General/unspecified Environmental or Social Lending Criteria	4	0
Mining Sector-specific criteria	8	4
Oil & Gas sector-specific criteria	0	0
No environmental or social criteria indicated	3	12

Note: Total number of companies is 15. Some are included in more than one category.

Financing Criteria Standards of Practice

As might be expected, companies were more forthcoming on the broad principles and standards they apply to project financing than they were on the details of the criteria they use. Two of the companies involved in sector-specific investment banking noted that because the M&A and asset purchases they brokered were between private parties, the onus of worrying about environmental issues rested with the purchaser. However, one of those firms did say it tried to steer clear of projects or potential clients where it appeared there were environmental issues.

Several of the firms said they expect their clients to adhere to local environmental standards in the countries where projects were to occur, while four firms said they require their clients to meet the standard of the home countries of the financial partner, e.g. Australia, Canada, South Africa, and the United States.

Four of the financial partners, including Australia's Macquarie Bank, Barclays, HVB, and smaller mining VC firm Resource Capital Funds specifically said they used World Bank Group guidelines, along with other criteria, when preparing projects for financing. In fact HVB's 2001 Sustainability Report devoted an entire page to its use of the World Bank guidelines, and said

that applying WBG criteria had in several cases led the HVB to turn down project loan requests that didn't meet the requirements. It is worth noting that HVB's public documentation and a conversation with a Barclays' mining specialist suggest those two organizations consider the WBG guidelines to be "minimum standards", and seek to improve on those benchmarks where possible. This is an area that could be explored in more depth in more detailed interviews, to learn more about potential "best practice" approaches that go beyond what the WBG is currently doing.

At least four of the financial firms appear to be proactively seeking to improve their performance in this area, ready to consider and adopt new ways to improve the environmental and social performance–and reduce the risks–of their clients' projects. The adoption of the Equator Principles by two of these, HVB and Barclays, is indicative of leading edge firms intent to continue moving forward in this area. And a mining finance officer at one of the banks was unaware that the WBG had guidelines, but was very interested in finding out more about them.

Table 4.7 Standards of Practice Required by Financial Partners

Standards of practice cited by companies	No. of Companies	Comments
No information provided	4	
None (does not enforce/consider)	1	Says it is investors' responsibility
Local Standards	2	Varies by country
Home office country standards	4	Australia, South Africa, North America
Unspecified "international" or "world class" standards	1	No details provided on specific benchmarks
World Bank Guidelines	4	Few details provided
Sets own standards, actively seeks best practices	4	Proactive approaches to exceeding requirements

Note: Total number of companies is 15. Some are included in more than one category.

Policy Comparison with WBG Guidelines

As noted above, three large banks and one small mining venture capital firm say they use WBG Guidelines when to reviewing projects for possible financing. However there was not much information provided beyond this assertion in their public information, except for HVB Group. In its *Sustainability Report*, HVB summarized what it called World Bank "minimum standards" which it follows in evaluating projects. These included:

- Ecological standards: including limiting the emission of pollutants, dealing with hazardous materials, and banning the use of certain materials in production processes

- Social standards: including regulations for resettlement measures, ban on child and force labor, retention of cultural assets and protection of indigenous peoples, and

- General standards: including procedures and types of environmental impact assessments, and involvement of those affected and other stakeholders.

It will be interesting to see if the adoption of the Equator Principles by Barclays and HVB will prompt more disclosure about their lending criteria and project evaluation and monitoring processes.

4.4 Selected Case Studies

Hypovereinsbank AG (HVB Group)

HVB Group's 99-page biannual Sustainability Report not only provides insight into how environmental and social "best practices" are developed and implemented, but it also shows how some firms approach sustainability as an evolving process, and not just as a one-time set of targets to be met. The German bank began focusing on environmental issues several years ago, including assessing the environmental risks associated with extractive, energy and infrastructure project lending. As noted elsewhere, this included rejecting some projects that did not meet the bank's criteria. Over time HVB has expanded its vision, placing environmental issues within the larger context of sustainability. Convinced that companies with so-called "sustainable" operations will be more successful than others over time, the company grew its Environmental Management System into a Sustainability Management System, with help from the Global Reporting Initiative's "triple bottom line" approach to corporate reporting.[11]

HVB's Sustainability Report details the bank's progress on implementing an array of sustainable banking products (e.g. sustainable lending criteria, renewable energy investments, investment instruments tied to "green" indices such as DJSI, etc.) and sustainable business operations (energy conservation, recycling, green office buildings, etc.), improving "work-life balance" for its employees, and increasing dialogue with stakeholders as part of its corporate citizenship responsibilities. HVB group ties all these initiatives together in an integrated strategy and management framework. Ideas are piloted within one business or office location, and then are rolled out company-wide, in a never-ending continuous improvement process. However, it is unclear to what extent HVB follows up with clients after the loans are made to ensure the projects' continue to meet acceptable environmental and social benchmarks, although this is one of the commitments laid out in the recently-signed Equator Principles.

[11] "Triple bottom line" refers to reporting systems that go beyond strict financial reporting to measure the economic, environmental and social performance of an organization.

Resource Capital Funds

Resource Capital Funds is a mining-focused venture capital firm that says it works actively to encourage junior mining exploration firms to improve their environmental and social performance. Based in Denver, it has invested in over a dozen companies with projects in Africa, Latin America, Southeast Asia, China and Russia. When Resource Capital invests in an exploration stage company, it says it brings to bear a team of its own experts who review the projects from top to bottom using the WBG guidelines. According to one if its principles, Resource Capital's attention to environmental and social issues at the earliest stages of the mining cycle makes good business sense. The management team has backgrounds in both mining engineering and project finance with large investment banks. So they are alert to the concerns of the larger production companies to whom they eventually hope to sell their stake in a bankable project. The company managers believe that "scrubbing" a project for environmental or social problems increases its "value proposition," and can make for easier sales and higher returns to Resource Capital and the exploration companies it has invested in.

4.5 Key Sector Findings and Issues for Further Study

Key Sector Findings

The following findings are derived from a review of the public information provided by the 15 financial partners included in this study, as well as brief verbal and email exchanges with representatives of a number of those firms, discussions with other industry experts and a review of industry literature in this area.

- The private financial partners reviewed for this study were much more aware of the WBG's work in environmental and social guidelines than were the extractive firms. This is due in part to the fact that a number of the firms included in the research have participated in co-financing of projects with the IFC or MIGA.

- However, as with the exploration vs. production dichotomy in the extractive industries themselves, the WBG guidelines appear to be better known and more accessible to large banks who underwrite project finance deals than they are to smaller VCs providing early stage risk capital to exploration firms.

- As with the extractive sector companies, financial partners which lend to them appear to be more advanced in their development of mechanisms for evaluating and mitigating risk on environmental projects than on social ones.

- While many of the larger banks still hold a traditional view of corporate-level environmental and social issues as philanthropic and community and public relations activities, a number of firms are starting to see them through the prism of risk reduction and mitigation. Others still see the adoption of proactive environmental and social policies and practices as a way of gaining a competitive edge in a world where the market is placing increasing value on "green" companies.

- While the smaller firms included in the financial sector group were generally willing to discuss what environmental considerations they did (or did not) apply to projects, some of the larger banks were reticent to provide details on the specifics of their project evaluation and approval criteria. One manager at a proactive bank said his firm's approach to environmental

risk is one of its competitive advantages. Nonetheless, it is clear that where financial players have adopted environmental and social criteria for projects there is a growing body of knowledge that resides within some of these financial institutions.

- There also is growing recognition by financial backers of extractive projects that environmental and social issues need to be addressed sooner in the project cycle, including at the exploration and development stages, since that is when the small problems left unaddressed can grow into large ones. This means that even the small financial partners can have a significant impact in this area, if they have the knowledge and the will to include these considerations in their financing activities

- Despite this knowledge, financial backers of junior mining companies say it can be an uphill battle to get these players to include environmental and social considerations in their projects, these issues are seen as immediate costs, and not investments for future project success (or future disaster averted). Conscientious financial backers apply their industry knowledge and what pressure they can to encourage junior miners to take on these additional considerations, but several of them indicated that governments and international financial institutions need to play a stronger role in encouraging the extractive companies to improve.

Issues for Further Study

This review of extractive industry financial partners provides some background on what some firms are doing to incorporate environmental and social considerations into the conditions of their financial support. But more information is needed to understand the incentives and disincentives for the financial partners and their clients to adopt such practices. This and other issues could be addressed by interviews with key managers at some of large banks that appear to have developed some "best practices", as well as with some of the smaller firms that are on the front lines of issues faced when financing the junior mining sector and small oil & gas E&P firms.

- What are the drivers that prompt the financial partners to adopt corporate-level environmental and social policies, and to apply environmental and social criteria to their extractive industry financing deals?

- What best practices, guidelines and other technical, managerial and financial resources are available to financial partners that wish to be proactive about environmental and social considerations?

- With ten of the largest project finance banks simultaneously agreeing to adopt the WBG-derived environmental and social lending criteria known as the Equator Principles, what impact will this move have on other financial partners, and on the extractive industry recipients of debt and equity financing?

- For those financial partners who are not familiar with the WBG's work in this area, especially for those financing early stage exploration and development activities, how can the WBG adapt its approaches to help these smaller players?.

- What lessons can the WBG and others learn from private financial partners which appear to be on the cutting edge of social and environmental risk management, and in combining the two into a synergistic sustainability management approach?

5.0 EXPORT CREDIT AGENCIES

5.1 Sector Overview

Most major and emerging economies have at least one export credit agency (ECA), created to promote and support the export of goods and services of the home country. These state-run or state-supported ECAs typically offer one or more of four types of financial products: short-term and medium-term trade finance (import & export credits), longer term project loans, loan guarantees, and investment insurance.

Because they are linked to commercial transactions, the pace of export credit activities tends to mirror overall international trade patterns, such as the slowdown in economic activities registered after September 11. However they have and will continue to play a significant role in funding the sale of U.S. and European aircraft to the world's airlines, as well as backing large infrastructure and extractive projects in emerging economies. Because these countries carry a higher market and political risk profile, especially for speculative projects like mining and oil & gas E&P activities, project sponsors and their commercial lenders are eager to get government-backed guarantees to provide cover for their efforts to penetrate these growing markets.

Although the World Bank Group's activities in the developing world attract much attention, private capital flows to emerging economies dwarf funding provided by multilateral organizations. ECAs have helped fuel this phenomenon by providing co-lending, guarantees or investment insurance to private sector projects. In fact, by the end of the last decade, long-term financing provided to developing countries by ECAs and other bilateral banks was nearly double that of multilateral institutions.[12] ECAs have come under fire in recent years from NGOs and others in civil society who say the ECAs provide government backing for risky projects, with significant environmental and social impacts that commercial lenders would be reluctant to finance by themselves. In fact some NGOs, like Environmental Defense, see the recent adoption by ten large private banks of the Equator Principles (IFC-derived environmental and social project lending guidelines) as increasing the pressure on ECAs to adopt similar, more stringent, common standards.[13] This research effort does not address the political dimensions of ECA project finance, rather it documents recent initiatives that key individual ECAs are taking to include environmental and social considerations in their lending decisions.

As promoters and guarantors of their national industries, there is considerable competition among ECAs. However there is also a fair amount of collaboration, including co-financing on large infrastructure projects, and some multilateral initiatives to set common standards and approaches through organizations such as the Organization for Economic Cooperation and Development (OECD). OECD convenes its member countries' ECAs in an Export Credit Group (ECG), to tackle common concerns about trade issues, corruption, corporate governance, etc. In January 2002, after considerable discussion on the environmental and social aspects of ECA-backed projects, the ECG released its *Draft Recommendation on Common Approaches on*

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[12] Cresencia Maurer with Ruchi Bhandari, *The Climate of Export Credit Agencies,* World Resources Institute, May 2000, citing data from: *Global Development Finance: Analysis and Summary Tables* (World Bank, 1998).

[13] "Banks in Drive for Project Principles," Demetri Sevastopulo, *Financial Times*, April 9, 2003.

Environment and Officially Supported Export Credits. Known as the "*Common Approaches*," this set of guidelines is designed to measure and minimize the environmental impact of projects receiving export credits.

All but two of the OECD members (the United States and Turkey) have agreed to implement the *Common Approaches* on a voluntary basis (The United States has its own standards, which are similar in many respects to the *Common Approaches*). They are based in large part on WBG policies and guidelines, and include suggested approaches for screening and classifying projects by level of environmental and social risk, a recommended format for conducting and evaluating environmental impact statements, and recommendations on exchange and disclosure of information among stakeholders, which include other ECAs, applicants, affected communities, and the general public. Although a number of OECD-member ECAs had environmental policies or guidelines in place prior to the publishing of the *Common Approaches*, many have since revised, or are planning to revise, their existing guidelines to align them with the OECD framework. The process is evolutionary, several ECAs, including the U.S. Ex-Im Bank, will be reviewing their policies in the next year, while the OECD itself will review the groups' experiences with implementing the Common Approaches before the end of this year.

Outside the OECD group, the Berne Union, an association grouping many of the world's ECAs, and the United Nations Environment Programme–among others–have provided other fora for discussing ways to improve and harmonize ECA consideration of environmental and social issues. However for many developing country ECAs, their primary exposure to such issues is through cooperation agreements and co-lending activities undertaken with the IFC, MIGA, regional institutions such as the EBRD, and individual OECD ECAs.

5.2 Selected Target Organizations

Ten export credit agencies active in financing extractive projects were selected for review in this project (see Table 5.1 below). They include a range of large and medium-sized OECD-member country ECAs from North American, European and Asian countries with significant mining and oil & gas sectors, as well as ECAs from two emerging economies (Brazil and South Africa) which provide assistance to extractive companies looking to expand beyond their home markets.

5.3 Results and Analysis

5.3.1 General Environmental and Social Policy Information

Amount and Types of Information Provided

Of all the sectors looked at in this research project, ECAs had by far the largest amount of public information on environmental and social policies and practices (see Table 5.2). As government-run or government-supported organizations, public disclosure of their activities is required by law, although many of the ECAs invoke confidentiality and trade secret provisions to withhold certain details of the transactions, including loan approval criteria.

Table 5.1 Selected Export Credit Agencies

	Company	Country	Total Assets 12/31/02 US$ Millions
1	Japanese Bank for International Co-Operation (JBIC)	Japan	87,119* (3/31/02)
2	Export Development Canada (EDC)	Canada	15,577
3	Export-Import Bank (Ex-Im Bank)	United States	15,463
4	Brazilian Development Bank (BNDES-Exim)	Brazil	8,011**
5	Export Credits Guarantee Department (ECGD)	United Kingdom	6,550 (3/31/02)
6	Compagnie Francaise d'Assurance pour le Commerce Exterieur (COFACE)	France	2,568
7	Finnvera	Finland	1,608
8	Export Finance and Insurance Corp. (EFIC)	Australia	604
9	Export Credit Insurance Corp. of South Africa (ECIC)	South Africa	110
10	HERMES Kreditversicherungs-AG	Germany	Not available

* Import/export assets only, does not include JBIC's Overseas Development Assistance assets.
** Includes assets for entire parent bank, not just import/export subsidiary activities.

Most of the ECAs reviewed for this project appear to have made the Internet their key conduit to potential clients and other stakeholders, providing extensive descriptions of their products, business principles, environmental policies, and guidelines for applying for their products. Half of them include initial screening questionnaires on their websites designed to identify projects with significant environmental or social impact.

Three of the ECAs reviewed provide markedly less information about export credit-related environmental and social matters. The recently-created Export Credit Insurance Corp. of South Africa (ECIC), does not yet have a website, although one is planned. Still in start-up mode, its inaugural 2002 *Annual Report*, describing its mission, products, and first nine months of performance is ECIC's primary source of public information. BNDES-Exim, the export finance arm of Brazil's Development Bank BNDES, provides extensive information on the environmental and social performance of its in-country development banking activities, and only a small amount of information on its export finance activities. A project information form on its website asks applicants to indicate the environmental and social impacts of its projects, but provides no indication of how that information will be evaluated by loan officers. Hermes, a private credit insurer which provides official export credits on behalf of the German government

Table 5.2 Level of Public Information Provided on Environmental and Social issues

Level of Public Information Provided	No. of Companies
No information provided on Website, in Annual Report, press releases, investor presentations, or other agency public information	1
Single reference (1 sentence to 1 page)	0
Multiple references (2-5 pages)	1
Significant amount of information (>5 pages)	8
Stand-alone Environmental and/or Social Reports	2

Note: Total number of ECAs is 10. Some appear in more than one category.

as a sideline to its own short-term export insurance business, also has minimal information on its website regarding the government-backed export credits, although it says it has implemented the OECD's *Common Approaches*.

Most of the information reviewed for this research project came from ECA websites, annual reports and other public information. In addition, brief verbal and email exchanges were conducted with three ECAs, as well as with several OECD and UNEP experts on ECA issues. This primary data was supplemented with a reading of relevant industry sources, including OECD public documentation on its member country ECA environmental and social activities, and several analyses of ECAs carried out by NGOs.

Public Commitments to Environmental and Social Principles & Practices

Eight of the ten ECAs either have either policies or statements of principle regarding the environment and social and/or sustainable development on their websites. The other two refer to environmental and social matters in their annual reports. Only three include environmental or social references in their corporate Mission, Vision or Strategy statements, although all say they consider the environmental and social aspects of their decisions to provide export credits and insurance.

Unlike the commercial banks, which have large consumer constituencies, only a few of the ECAs appear to carry out environmental or social/community relations-related activities outside of their core business of export credits. Most of these other activities are in connection with other non-export-related functions these agencies may carry out under separate government mandates, such as BNDES' role in promoting social development within Brazil.

Standards of Practice

Slightly over half of the ECAs reviewed for this study said that all their projects must comply with host country regulations, laws and standards as a minimum requirement (see Table 5.3 below). However nearly all of the ECAs reviewed for this study indicate they use the World Bank and IFC *Safeguard Policies, IFC Environmental, Health and Safety Guidelines* and the

Table 5.3 Standards Used By ECAs for Evaluating Environmental and Social Impacts of Projects

Standards of practice cited by ECA	No. of ECAs	Comments
Local (host country) laws, regulations, and standards of practice	6	Cited as de facto minimum requirement
Home country regulations or standards	9	Government and industry standards (e.g. Australian Mineral Industry Code on Environmental Management) cited
Recognized international standards	5	WHO, EU, EBRD, UNESCO, UNEP, IUCN, ICMM, Ramsar Convention on wetlands cited
Unspecified "international" or "world class" standards	1	No details provided on specific benchmarks
World Bank Group guidelines	8	Pollution Prevention & Abatement Handbook, WB and IFC Guidelines and Safeguard Policies

Note: Total number of ECAs is 10. Some appear in more than one category.

WBG's *Pollution Prevention and Abatement Handbook (PPAH)* as their baseline references for classifying projects and evaluating the environmental and social impacts of projects. They also use the WBG guidelines to advise applicants on what information needs to be provided for developing their Environmental Impact Assessments. Most of the ECAs say they also supplement these guidelines with other reference materials or standards developed by WHO, UNEP, other international organizations, regional development banks, and their own governments.

5.3.2 Environmental and Social Review Process

Environmental and social review processes typically involve the following steps: an initial screening and classification of projects by level of potential environmental and social impact; followed by review by the ECA of sponsor-generated Environmental Impact Assessments, which detail those impacts and identify management plans and remedies. This is followed by a decision to support the project, which may or may not come with certain conditions, including ongoing monitoring of critical issues. As discussed below, exchange and disclosure of information among various stakeholders is an important part of the process, and one that has generated much of the controversy concerning ECA activities. Within the OECD, these processes, and the guidelines used for carrying them out are very similar, since many of them were adopted in conjunction with–or in response to–the formulation of the "*Common Approaches*." Table 5.4 shows how ECAs approach these various elements of this process.

Screening & Classification

All eight OECD member ECAs included in this study use a screening process, typically involving a questionnaire filled out by the applicant, which asks series of questions designed to identify potential environmental or social issues surrounding a project. Most of these

Table 5.4 Project Classification, Screening and EIA Formats

Public Information provided	Own Criteria	WBG or OECD-derived	No public information provided
Screening Questionnaire	6	N.A.	4
Project Classification System (e.g. Categories A/B/C)	2	6	2
Definition of sensitive areas or sectors	2	6	2
Suggested EIA format	2	6	2
Checklists of additional information requested, allowable metrics for emission levels, etc.	3	Unknown	2

Note: Total number of ECAs is 10. Some are counted in more than one category.

questionnaires contained checklists of potential triggers based on project location and the type of industry involved. Potential BNDES-Exim clients are also asked several questions about environmental impacts in their initial loan request. The information provided by South Africa's ECIC did not identify what kind of screening and classification procedures it followed.

Using the questionnaires, the eight OECD member ECAs then classify a project into one of several categories reflecting the potential for environmental or social impact. Seven of the eight OECD members base their classification scheme on a suggested OECD model, which is derived from a World Bank and IFC project classification scheme. The three primary categories include:

- **Category A** projects are those that have "the potential to have significant adverse environmental impacts...[which]...may affect an area broader than the sites or facilities subject to physical works."[14] These are typically projects in "sensitive sectors" (including mining and oil & gas E&P activities), and/or which are located in "sensitive areas," such as national parks, wetlands, areas of archaeological or cultural significance, etc. Most of the ECAs provide illustrative lists of such sensitive sites and sectors, adapted from OECD materials, which are in turn derived from the WBG model.

- **Category B** projects are typically described as those for which "potential environmental impacts are less adverse than those of Category A projects"[15] with site-specific impacts which may be reversible and for which mitigation is considered possible.

- **Category C** projects are described as those which are likely to have minimal or no adverse impacts. In ECA terms, these are typically small short-term export credits or insurance providing cover for shipments of commodities, consumer goods, spare parts, etc., as well

[14] OECD, *Draft Recommendation on Common Approaches on Environment and Officially Supported Export Credits: Revision 6*, OECD, Paris, 2002.

[15] OECD, *Common Approaches*.

credits offered for airplanes, ships, and vehicles, for which the environmental impact is considered to be well-known.

The United States Export-Import Bank (Ex-Im Bank) has its own three-tier classification system which is uses slightly different characterizations, but which is analogous to the OECD approach used by the others. The Japanese Bank for International Cooperation (JBIC) also has a fourth classification–"FI"–for financial intermediaries (i.e. other banks) involved in transactions, which also is derived from a WBG category which was not included in the *Common Approaches*.

Determination of which projects must be accompanied by EIAs varies by ECA, but all eight OECD members require EIAs for all "Category A" (or its equivalent) projects. Some ECAs require Category B projects to complete full EIAs, while others say they will conduct internal environmental assessments, usually in consultation with project sponsors and/or other stakeholder groups. Several ECAs note they retain the right to reclassify a project as more information becomes available, in some cases asking for EIAs or other supplemental information to be submitted after the project evaluation process has begun.

The OECD recommends an illustrative EIA format to its members, which is drawn virtually verbatim from the World Bank's *Operational Manual BP 4.01 (Environmental Assessment*). The suggested EIA format includes the following sections:

- An Executive Summary
- Project Description, including "geographic, ecological, social and temporal context" and indicating any need for "resettlement or social development plan."[16]
- Baseline data, including physical, biological and socio-economic conditions
- Environmental Impacts: including assessment of positive and negative impacts, and identification of mitigation measures and impacts that cannot be mitigated
- Analysis of alternatives: including feasible alternatives to the project site, and various technological, design and operational options (including a "without project" scenario)
- Environmental Management Plan: describing mitigation monitoring and other measures to be taken during construction and operation.
- Consultation: including a record of meetings held with affected people, local non-governmental organizations and regulatory agencies

A number of the ECAs suggest their applicants use this format, while others have adopted analogous formats asking for similar information. In addition, a number of them provide specific checklists of quantitative information to be provided and/or environmental performance criteria that must be met, such as emission levels. Most of the criteria and quantitative metrics focus on environmental impacts. However, several agencies stress their interest in information on projects

[16] Common Guidelines, Annex II, based on the World Bank's *Operational Manual BP 4.01*.

that involve resettlement, or other impacts on ethnic minorities or original inhabitants of a region, and sites with historical or cultural value. One agency asks if the women of an affected community are consulted with, in addition to the men, to ensure that the entire community's input is gathered on a project.

Lastly, three of the ECAs have developed their own sector-specific guidelines, including those for extractive industry projects. JBIC provides extensive checklists of metrics to be reported on for projects in Mining and Petroleum/Natural Gas Development. Ex-Im Bank provides specific guidelines for Oil and Gas Development, and Mining and Milling. And France's Coface recently posted draft sectoral guidelines on its website for several sectors, including Onshore and Offshore Oil and Gas Extraction, and Oil and Gas Pipelines (see Case Study below).

Disclosure and Exchange of Information

A review of ECA information provided on procedures for disclosure and exchange of information indicated some of the issues that make this topic a sensitive one among ECAs and between ECAs and other stakeholders (See table 5.5 below). ECAs and their export credit customers have traditionally been reluctant to release information on their pending transactions, citing the keen competition that they often face against similar customer/ECA partnerships from other countries on a given deal. However other stakeholders, including the communities affected by projects and other members of civil society, say this makes the process less transparent, and may deprive stakeholders the opportunity to have an open discussion on the pros and cons of a given project.

That may be why the *OECD Common Approaches* contains only the most general of recommendations encouraging ECAs to share project information with outsiders, even though it does strongly encourage the inclusion of relevant stakeholders. And it may explain why much of the details of how decisions are arrived at are not widely available. Partly in response to civil society criticism, several ECAs are intending to revisit their disclosure policies. ECGD recently completed a round of public consultations on its disclosure policy, and is expected to introduce changes in 2003.

Discussion and Input into Overall Policies and Practices

The most open and complete exchange of information provided by the ECAs reviewed for this study is on the formulation of the ECA's overall policies on environmental social and other issues. Nearly half of the ECAs reviewed for this study engaged stakeholder groups in forming their environmental policies, through a combination of public meetings or comment sessions, soliciting comments on websites, etc. A number of the ECAs, including Australia's EFIC, Canada's ECA, and ECGD solicit web input on their policies once implemented, and publish both the input and their responses to it. Several ECAs have outside advisory councils, made up of prominent business leaders, NGO representatives and other experts who advise them on the creation and implementation of policy.

Table 5.5 Disclosure and Exchange of Information

Category	Type of Disclosure/Exchange	No. of ECAs
Overall Policy & Procedures	Organization's policies and/or guidelines on website	8
	Public comments on overall policy accepted	6
	Public comments & ECA responses made public	3
Project Information (Pre-Approval)	Basic project info made available	4
	EIA (or key elements) made public	2
	Public comments on specific projects accepted	2
	Public comments & ECA responses made public	0
	Stakeholders meetings required or encouraged	4
Project Information (Post-Approval)	Basic project information made available	6
	EIA (or key elements) made available	2
	Results of environmental review released	1
	Post-disbursement monitoring & audit reporting released	0
	Aggregated project information on website or in annual report	5

Note: Total number of ECAs is 10. Some are counted in more than one category.

Information on Individual projects

This is where the organizations are the most opaque. Many provide no information at all about project applications while they are being processed. Few of the ECAs reviewed here release details on project approval or disapproval decisions. Some ECAs will provide only aggregated data on projects even after they've been approved. Their rationale is that the information relates to private commercial transactions in competitive markets, and thus needs to be kept confidential.

Pre-Approval Disclosures and Exchanges

Four ECAs: EFIC, Canada's ECD, JBIC and Ex-Im publish summary information on projects that are under consideration, including project and company names, contract amounts, and in some instances noting if it is a Category A project. A number of ECAs, including ECD, express the desire that the OECD group as a whole adopt a more proactive and widespread use of prior notice and releases of project information. On its website, in a discussion of disclosure issues, ECA also voices the concern shared by other ECAs, that individual agencies are reluctant to reveal too much information about a deal in advance if competing ECAs are not disclosing to the same standard. Another complication is that the ECAs often sign confidentiality agreements with the project applicants, which limits their ability to release information if the companies themselves are reluctant to disclose. This appears to an open issue that may be resolved in subsequent revisions of the Common Approaches.

Post-Project Disclosures

While a slightly larger number of ECAs disclose information after a project is approved, for many this information is limited to the names of the companies involved, the type of project, credit amount, and in some case which environmental classification it received. A number of the ECAs only publish information on projects where their participation exceeds a certain value (e.g. $US10M for Ex-Im, 20M Euros for Coface). JBIC is the only agency that says it releases the results of its environmental reviews. Coface's project write-ups include some environmental data on its projects, including potential issues, but it is minimal and varies by project. None of the ECAs indicated that they release monitoring information on projects with covenants or known environmental issues that are to be tracked by the company and the ECA after the money is disbursed.

Decision-making Process

While most of the organizations highlight the fact that they use WBG and other international standards and best practices as their benchmarks, they provide little public information on how those criteria are applied, or on what factors ultimately determine if a project is accepted or not. At least three of the ECAs definitively state that not all projects are accepted, and that those not meeting a threshold standard from an environmental or social perspective will be turned down. Some of the ECAs say they will accept Category A projects that do not meet all of the relevant criteria, subject to conditions which may be placed on the project either before disbursement, or once it is underway.

Stakeholder Participation

While project sponsors are encouraged to include stakeholder input in their applications and EIAs, the agencies appear to take a low profile role in facilitating the process, leaving it up to the applicants. EFIC and Ex-Im Bank open 60-day public comment periods to solicit input on their participation in the individual projects under ECA funding consideration. EFIC releases summary project information on its website for comment, while Ex-Im Bank releases the full EIAs of its equivalent of Category A projects. Ex-Im also notes that it will accept and consider any information about a project received from interested parties, but that these parties will not have any legal standing in the decision-making process, nor will they receive a response from Ex-Im regarding issues they raise.

Other Indicators

Other indicators of ECAs' commitment to environmental and social responsibility include:

- Eight ECAs indicated they have dedicated staff to assess environmental issues, and several indicated they bring in outside consultants as necessary.

- Two cited the ISO 14000 standard as their internal benchmark for environmental management. Coface has ISO 14000 certification status, while ECGD says it uses the ISO parameters to guide its management practices.

- EDC and BNDES say they are signatories to the UNEP *Statement by Financial Institutions on the Environment and Sustainable Development* ("UNEP FI"), a set of environmental sustainability principles for financial institutions.

- Canada's EDC has an ombudsman, who is an independent advisor to whom customers (and presumably other stakeholders) with grievances can address themselves.

5.4 Selected Case Studies

Compagnie Francaise d'Assurance pour le Commerce Exterieur (Coface)

The French export credit agency Coface is one of a number of export credit agencies which are not only proactive about improving their own efforts, but are creating "best practice" models for others to follow. Coface recently posted on its website sector-specific environmental guidelines for three sectors: thermal power plants, large dams, and oil & gas projects. The oil & gas guidelines include detailed sections on onshore and offshore extraction, pipelines and transportation, refineries, petrochemicals and storage. Coface's guidelines are based on parameters drawn from the WBG's *PPAH* and the IFC's *Environmental, Health and Safety Guidelines*, but also provide additional guidance. In December 2002, the agency instituted a three month trial period during which it solicited comments on its new sectoral guidelines via its website. One of the interesting features is that each impact factor to be addressed by applicants has three levels of criteria against which it can be measured. The *reference criteria* are the bare minimum below which a project is unlikely to be approved. Projects are acceptable if they meet the *target criteria* in full. And the *best practice criteria* "advocate the use within the project of the best available technology or practices which are of particular interest from an environmental point of view, which Coface wishes to encourage."[17] While including a best practice goal is commendable, it is unclear from Coface's website what benefit or incentive an applicant may gain from Coface by making the extra effort.

Export Credit Insurance Corporation of South Africa Ltd. (ECIC)

One of the newest export credit agencies is the Export Credit Insurance Corporation of South Africa (ECIC), created in 2001. Set up as a limited liability company funded by the government, but with an independent board of directors, ECIC assumed the responsibility for medium and long-term export credit insurance from a private firm that had managed those activities on behalf of the government since 1957. ECIC's mission is to help South African companies–and the South African banks that back them–open up new export markets by assuming a portion of the risk. One goal is to expand beyond South Africa's traditional export market, the Southern African Development Community (SADC), to pursue opportunities elsewhere in Africa, in the Americas, Europe and Asia. A large part of ECIC's portfolio is mining-related, ranging from processing operations such as the Mozal aluminum smelter in Mozambique to exports of mining equipment and supplies. ECIC says it is committed to meeting international standards of practice. Its COO, Emile Matthee, told researchers that the organization follows World Bank guidelines for assessing the environmental and social aspect of projects. It is also seeking to collaborate with other multilateral and bilateral institutions, having recently signed agreements with MIGA, and with Canada's ECD.

[17] *Sector-based Environmental Guidelines* (Coface, November 2002)

5.5 Key Sector Findings and Issues for Further Study

Key Sector Findings

- The WBG guidelines appear to be central to these ECAs' efforts to adopt environmentally and socially responsible business practices. Most are using OECD guidelines that are directly derived from the WBG materials. In addition, many of these ECAs are further exposed to the WBG approach through collaboration with the IFC or MIGA on large projects.

- However, as with any broad guidelines, much of their effectiveness and credibility depends on how they are applied. The decision-making process used by many ECAs remains relatively opaque, which provides ample ammunition to critics in civil society who ask whether their interests and the interests of the affected communities are being well-served with taxpayers' money.

- ECAs play a key role in financing extractive and other projects in emerging markets. They not only provide their own financial support, but their participation also has a multiplier effect in terms of attracting additional private capital to those markets. As such, they need to play an active role in the debate on how the economic goals of the extractive industries can be meshed with the sustainable development goals being promoted by the World Bank, civil society and others.

- Given their primary mission and traditional focus on trade promotion, the later addition of environmental and social responsibility to ECAs' charters has created challenges that are not quickly or easily overcome. Striking the right balance between confidentiality to maintain national competitiveness, and transparency to provide assurances of corporate social responsibility, is hard work but absolutely necessary. The principles and policies will only be effective if they are translated into workable practices.

- The OECD-member ECAs are grappling with these issues, and have developed a useful framework for a common approach. However, the lack of adoption by all OECD members has hampered efforts to forge a truly universal standard that can be implemented, enforced throughout the OECD community, and improved upon going forward.

- Some ECAs, following in the path of the WBG, have begun to develop specific guidelines for extractive sectors. However as with the general guidelines, the emphasis has largely been on developing *environmental* criteria and performance metrics. More effort needs to be spent by ECAs on *social impact* issues, which are more qualitative by nature, and for which the impacts and remedies may be more diffuse or harder to identify.

- Other ECAs, especially those in emerging countries, do not appear to be benefiting from the growing synergy and progress on environmental considerations within the OECD group. And yet as emerging economy extractive companies expand outside national markets, their ECAs will undoubtedly face the same pressures to be environmentally and socially responsible. The WBG and other international institutions may have a role to play here in facilitating dialogue and sharing of best practices among developed and developing country ECAs.

5.6 Issues for Further Study

- What are ECAs' primary challenges for implementing environmental and social guidelines for projects in the extractive industries? Are they related to internal or national politics, the nature of their national extractive industries, or larger forces?

- How can ECAs participate in exploration-stage projects in the mining or oil & gas sectors, and thereby play a role in influencing the environmental and social policies and practices of those players?

- When participating in production-stage mining or oil & gas projects, to what extent are the environmental and social issues that can be created at the upstream exploration and development stages of the project cycle considered or dealt with by the ECAs?

- OECD-member ECAs all appear to use WBG guidelines as the key reference for their environmental and social reviews. How would these agencies like to see WBG guidelines, practices, and collaborative efforts improved?

- How will the adoption of the Equator Principles by ten leading private project finance banks affect the environmental and social lending criteria and practices of the ECAs?

- What are the lessons learned, and/or best practices that leading-edge ECAs have developed that could help the WBG to improve its activities and its impact on the extractive industries?

- What role can the WBG and the OECD-member ECAs play in extending their knowledge, best practices and *Common Approach*-type frameworks to emerging market ECAs?

6.0 SUMMARY OF FINDINGS AND ISSUES FOR FURTHER STUDY

As the preceding sections have shown, a number of organizations that play key operational or financial roles in the extractive industry have begun to include environmental and social considerations in their activities. As the sectoral analysis indicated, the challenges can vary along a number of dimensions, including the specific sector one is in (mining, oil & gas, finance, export promotion), the size (and likely trajectory) of the organization, and what stage or stages of the production cycle it is involved in.

Limitations of Public Information

There are limitations to what can be learned when working primarily with public information. Some companies devote more attention to–or do a better job of–telling their story to the public than others. And it is always told from their point of view. These limitations have several implications within the context of this study:

- Information was accepted–and presented in this report–largely at face value. If a company said it had implemented a certain policy or activity, it was presumed to be true unless the researchers found other information to the contrary. Sometimes apparent contradictions were found within the companies' own materials, such as an extractive firm that professed a strong commitment to social development, yet provided no evidence in its public information of any concrete efforts to actually benefit nearby communities.

- Some of the most proactive firms are also the biggest targets of criticism. Some of the extractive firms, financial partners and ECAs appeared from their public information to among the most proactive about environmental and social practices. But they also have been the target of considerable criticism by NGOs. It was beyond the scope of this study to reconcile such differing views of an organization's commitment or performance, or to determine if the proactivity was solely in response to the criticism, or driven by other motivations. The researchers focused on what the company had reported, while attempting to highlight issues where they were aware of them.

- Importance of looking beyond policy statements for other signs of commitment. In order to get beyond potentially hollow policy pronouncements, the researchers looked for a variety of indicators (e.g. senior management positions with dedicated responsibility for environmental or social affairs, environmental management systems in place, etc.) that provide additional insight into the true level of operational commitment a company has made to environmental and social issues.

- Some companies focus on action, not words. This is particularly true with smaller firms that are focused on day-to-day operational survival, and not on their public image. A concerted effort was made to identify several smaller extractive firms and financial partners that have adopted environmental and social principles, but who may not devote a lot of their public communications to those issues.

- The constant evolution of the industry means that the information in this report is dated. During the time that this report was being researched and finalized, a number of the target

companies were involved in mergers and acquisitions, the price of gold rose–and fell–significantly, new extractive projects were financed and begun, and new environmental and social policy initiatives were launched, most notably the signing of the Equator Principles by ten major banks. So these findings should be seen as an early-2003 snapshot of an industry in transition.

Key Findings

A number of sector-specific findings were included in each sector review. Many of those shown here cut across more than one sector:

- World Bank Group policy impacts on small Exploration & Production (E&P) companies appear indirect and minimal to date. There is some evidence of a "trickle down" effect from large mining firms and their financial backers that are aware of WBG principles and policies. But there is little evidence to indicate that there is widespread awareness or acceptance among the smaller firms of the guidelines, or what implementing them might entail for their operations. Where companies did cite use of WBG guidelines, the level of public information provided on environmental and social policies did not provide enough detail to permit a detailed comparison of these policies with those of the WBG.

- WBG appears to have a more significant and direct impact on private financial partner and Export Credit Agency (ECA) environmental and social initiatives. A number of these financial institutions, including some of the signatories of the "Equator Principles", indicated that WBG guidelines have become a baseline reference for their activities, providing a useful tool to hold their extractive sector clients to higher environmental and social standards. In addition, some organizations are implementing their own best practices that go beyond the work of the WBG.

- The environmental and social approaches of extractive companies and financial institutions that *do* address environmental and social issues generally tend to fall into one of three broad categories, reflecting their level of "proactivity:"

  1. Meet local (often minimal) standards. Companies respond on a project-by-project basis, and may do little or nothing to mitigate environmental or social impacts if local authorities do not require or enforce such practices. For some financial partners, especially smaller early stage exploration investors, this may mean taking a hands-off approach to these issues, which are viewed as the extractive company's problem.

  2. Meet commonly and/or internationally accepted guidelines, most notably the World Bank and IFC *Guidelines* and *Safeguard Policies.* Other standards cited include industry initiatives (GRI, ICMM, OGP/IPIECA, etc.), intergovernmental guidelines (OECD, UNEP), and key national compliance and reporting requirements (Australia, Canada, United Kingdom, United States).

  3. Develop their own "best practice" standards, by going beyond the minimums set by local governments or the WBG to create their own set of principles, policies and practices. These organizations often see their environmental and social performance as a key

strength of their company, and continuous improvement management practices drive the process forward.

Other findings include the following:

- Small, early-stage companies lag behind larger and/or more vertically integrated ones in adopting policies and practices. Many of the smaller firms active in upstream activities have little or no environmental or social policies of their own. But there are exceptions, including some of the organizations in this research effort. A follow-on research effort to interview executives from these companies could shed light on the reasons that lead some smaller companies to adopt proactive policies, while many others do not.

- Anecdotal evidence does suggest that smaller, upstream firms are feeling increasing pressure to act, from senior downstream companies, financial institutions, government regulators, and civil society. As a result, a number of them have begun to proactively consider these issues, whether willingly or unwillingly.

- More extractive and financial organizations address environmental issues than social ones. Environmental impacts are better defined and can be measured for compliance. Social impact analyses are newer, more qualitative, and harder to quantify in terms of savings or return on investment. The body of solutions and best practices is smaller, and the work may require non-traditional skill sets (e.g. hiring anthropologists rather than engineers for the policy work, as one large international mining company has done)

- Company initiatives in their home countries appear more advanced than those elsewhere. A number of the extractive companies reviewed for this project described well-developed environmental and social programs in their home countries. It was unclear if they apply the same standards worldwide, or if they implement the same level of programs in emerging markets as they do at home.

- Financial firms see environmental and social matters as risk issues. Export credit agencies and a variety of financial institutions ranging from venture-capital funds to large investment banks show a higher level of sensitivity to environmental and social issues than their extractive clients.

- Financial organizations are concerned about social issues but want better tools. Several bankers reported struggling with how to address social impacts in lending and investing criteria for emerging-country projects. They use the WBG guidelines as a "default solution," but would like other tools to quantify social risk, and to point their extractive clients towards more socially responsible practices.

- Partnering arrangements can complicate environmental and social responses. There appears to be an increasing trend toward pooling of efforts and risk sharing on projects among multiple players, even at the earliest stages of exploration. This complicates efforts to establish common standards and practices, since there may be varying levels of commitment and/or systems in place to ensure consistent attention is paid to environmental and social issues throughout a project lifecycle. Non-operating or minority partners with higher standards may have little quality control over operations run by a more lax operating partner.

Issues for Further Study

Some of the organizations chosen for this study, including small exploration firms and venture capital firms, appear to be proactive in responding to environmental and social challenges. Others may just be coming to the realization that they need to devote more effort to these areas, and will need guidance to make the transition. Interviews with the leaders of these organizations could provide significant insight for other companies struggling with these same issues. Such targeted questioning could also elicit specific recommendations from the industry players themselves as to ways the World Bank Group can improve and better support their efforts in addressing environmental and social concerns.

Issues that merit further study include:

- What are the external and internal drivers, including incentives and disincentives, that lead extractive companies–especially early stage exploration and development firms–to adopt environmental and social policies and practices?

- Similarly, what are the drivers affecting private financial partners and export credit agencies to develop their own environmentally and socially responsible policies and practices, and to compel their extractive industry clients to apply the same principles?

- With ten of the largest project finance banks simultaneously agreeing to adopt the WBG-derived environmental and social lending criteria known as the Equator Principles, what impact will this move have on other financial partners, and on the extractive industry recipients of debt and equity financing?

- What are the challenges faced by extractive companies or financial organizations in adopting environmental or social strategies, especially in translating goals and policies into practice?

- What is the role the WBG should play in helping the smaller and upstream firms improve their environmental and social performance? Possible options include:

  - Working directly with these companies (e.g. financial support and technical assistance)

  - Providing traditional WBG clients and partners (larger extractive firms, private banks, ECAs, other multilateral and bilateral agencies) an improved set of carrots and sticks to "incentivize" the exploration companies

  - Assisting emerging market policy-makers and regulators to create better legal, regulatory, and enforcement mechanisms to ensure extractive companies operate to the highest environmental and social standards of practices

A set of targeted interviews, following up on the findings uncovered in Phase One, and probing the issues raised above, would provide a richer picture of the challenges faced by extractive companies and their financial backers in moving toward as more environmentally and socially responsible approach to doing business. And it would provide the WBG indications on how it can best play a role in bringing this change about.

A draft Interview Guide for a potential follow-on Phase Two research effort is included in this report, in Section 7.0.

7.0 PROPOSED INTERVIEW APPROACH & QUESTIONNAIRE FOR PHASE TWO

Background

At the request of the EIR Secretariat, this report includes a section presenting the different options available to facilitate a review (described in the Terms of Reference, or TOR, as Phase Two) of the WBG's impact on corporations and institutions in regards to environmental and social policies commonly assumed to be beyond the purview of the bank. These organizations include junior and intermediate sized corporations, ECA's and private-sector banks. The first part (Phase One) of this two-part study revealed the extent to which environmental and social policies exist in this group of institutions typically not targeted by the WBG. It also compared these *stated* policies in the target group with the WBG's own social and environmental policies and sought to indicated whether they were replicated by these other actors. The implicit hypothesis being tested was whether the WBG played a role in setting the social and environmental policy "bar" higher for these organizations than they would have otherwise set for themselves.

Not examined in any great detail in Phase One was the policy-making processes that these economic actors go through in forming, or choosing not to form, social and environmental policy. Nor were capacity issues regarding implementation *at the project level* examined in any depth.

Objective

Phase Two proposes to analyze these processes in order to identify motivating forces behind an organization's decisions regarding environmental and social policies and to note experiences (successes, constraints, etc.) in implementing environmental and social activities where they exist. The analysis will also determine what influence, if any, the WBG has had with decision-makers in the target group.

The three objectives for Phase Two are:

1. Determine external and internal drivers behind the adoption–or non-adoption–of social and environmental goals, policies and practices;

2. Identify the successes and constraints encountered by respondents in implementing environmental and social activities that conform to the stated goals and policies; and

3. Identify the impact, if any, of the WBG environmental and social policies on decision-makers in the target organizations in order to refine the bank's efforts to improve the adoption of desirable environmental and social policies and practices in the industry.

This subsequent research effort will build on the collected in Phase One from the 65 target organizations. Because of the iterative manner in which the Phase One study was carried out, the task of delving into *motivations* and organizational *interests* via a survey in Phase Two will be significantly simplified. The various approaches to consider are described below followed by a draft of an information-gathering instrument (questionnaire) that together will enable researches

to answer the more compelling questions raised by Phase One, and meet the objectives as outlined above for Phase Two.

Methodological Options

The approach proposed to gather information for the analysis is to conduct corporate interviews via email and telephone with key managers of extractive firms and their financial partners, primarily with a sampling drawn from the same organizations from which information was gathered in Phase One. In addition to targeting companies that already have policies and practices in place, the survey would also include some organizations that have no (or minimal) policies. It would be helpful to discern the reasons an organization does not have any stated environmental and social policies or activities, factors that would have excluded them from the Phase One study.

Three options are described below that can be considered for the survey:

1. Structured, in-depth interviews via telephone or–where feasible–personal visits, with key contacts from each of the four organization types included in Phase One, e.g. mining or oil & gas firms, private financial partners and export credit agencies). (This option would produce primarily anecdotal information with a limited amount of quantitative data produced by non-open-ended questions posed verbally by the researcher.)

2. Structured in-depth interviews as described above, but supplemented by having respondents complete a questionnaire that includes quantifiable answers. (This option retains the anecdotal quality of the survey but would produce better quantitative data with a higher degree of reliability.)

3. A combination of a smaller number of structured interviews with key contacts as described above, supplemented by an survey distributed via the Internet to a larger population drawn from the Phase One target population. (This option would rely on fewer structured interviews to uncover qualitative information while inducing more and better quantitative data from a group of respondents.)

All three options are intended to be undertaken within the time frame for the completion of the EIR program. For the purposes of this report, and taking into account the view of the researchers, Option Three is the preferred approach and is described in greater detail below. It offers the benefits of ensuring sufficient anecdotal information to examine the motivation and reasons behind adoption or non-adoption of environmental and social policies and activities, which cannot be obtained reliably short of structured interviews. At the same time, the opportunity to reach a larger number of decision-makers through an innovative, cost-effective on-line surveying technique, buttressed by telephone and email follow-up, should not be overlooked. The latter will produce information that researchers can analyze carefully to enrich the report's findings and recommendations. In the event another approach is used, the information below can be modified as needed.

Target Population

Approximately 20 to 25 in-depth corporate interviews will be undertaken by researchers, drawing from the pool of more than 65 companies and organizations included in Phase One, as well as any additional actors identified by WBG and/or EIR reviewers. The selection process will be based on the criteria and categories developed in Phase One that differentiate the social and environmental policy commitments of the different actors. It is anticipated that the group would be representative and include a range from "best practitioners" to "non-practitioners."

The distribution among the four sectors could be as follows:

- Mining: 6 interviewees, to include one senior that subcontracts to juniors, two exploration-focused juniors, two expansionary juniors/intermediates, and one "small" junior.

- Oil and gas: 6 interviewees, to include, at a minimum, two gas-focused companies and one drilling & oilfield services company.

- ECAs: 3 interviewees, preferably to include at least one export credit agency from outside the OECD.

- Private Financial Partners: 5 interviewees, including two investment banks involved in project finance, two venture capital/investment funds, and one other private financial partner.

Efforts would be made to identify and include at least one extractive firm and one financial institution that have collaborated on one or more projects, as a way to show the interplay between the two, including how policies might trickle down from the financial partner to the extractive company.

In addition to the above categories, which were the focus of Phase One, researchers will contact a small number of respondents described below to ensure that additional perspectives are included:

- Industry Observers: The opinions of other key players who can offer insights into the application of environmental and social policies within the extractive industry; such as an OECD expert, a prominent environmental NGO representative, an extractive industry association representative (ICMM and/or OGP), government regulator, specialist in Corporate Social Responsibility, WBG policy analyst (internal or external); fund manager for an ethical investment fund, etc.

Interviews will typically require from 25 to 45 minutes, be conducted over the telephone in most instances, and may include follow up via email for clarification. Respondents in the target population will receive an initial email invitation to participate that describes the objectives and sponsors of the survey. A larger group of respondents will be invited via email and follow-up telephone calls to complete a questionnaire available *online*. Participants simply navigate to the specially-created Internet address and, using user-friendly pull-down menus, complete the questionnaire with none of the inconveniences associated with paper surveys (finding them, filling them out in pen, mailing them back, etc.). The system is widely used by corporations and is suited for Phase Two. Answers are entered by an online software company thereby avoiding

the challenge and expense of managing data entry and data cross tabulations of any type can be easily produced without delay.

Draft Interview Guides and Questionnaires

Information-gathering for **extractive firms** will be divided into the following areas that conform to the three objectives described above:

- Decision-making: External and internal motivations driving decisions about environmental and social policies and activities
- Implementation: Challenges in putting environmental and social goals and policies into practice.
- Impact of WBG: Influence–if any–of the WBG on the above.
- Suggestions: Open-ended questions to elicit fresh ideas on the subject.

Information-gathering for **ECAs and Private Financial Partners** will cover the same four areas above but will be tailored to determine the extent to which environmental and social safeguards are factored into lending criteria, the project approval process and project monitoring.

The considerable background information on each organization selected, which has already been collected in Phase One, will provide the context within which each interview can be conducted (and tailored as needed) and results analyzed and cross-checked. Since information from each respondent's organization (name, purpose, size and history of organization, environmental and social policies, etc.) has already been gathered, the survey can focus on policy drivers and other meatier issues of interest to Phase Two.

Below are proposed illustrative questions that can form the basis for either the Interview Guide or the questionnaire. Each question is preceded by a theme (written in capital letters, and which would not appear in the written questionnaire).

SECTION A: CREATING ENVIRONMENTAL & SOCIAL POLICIES

1. PRELIMINARY: Does your company have environmental and social policies or activities that we have not identified in our preliminary email contact? If yes, what are they? (Note: the interviewer will have the stated policies at hand.)

2. ENVIRONMENTAL SURROUNDINGS: Describe the surrounding circumstances that led to the development of your organization's first environmental and social policy? (Note: interviewers will probe to determine the importance of driving factors, such as financial, legal, technical, managerial, etc. in line with each the background information at hand for each organization.)

3. GUIDING LIGHT: Is there a policy or program., for example from another organization, a lender, a competitor, an NGO or an industry association) that has served as a model or

"guiding light" in the development of your organization's environmental and social policies? If yes, please explain.

4. MECHANICS: a) What was the process used to create your environmental and/or social policy? b) Does your organization have a definition for sustainable development and/or sustainability? If yes, what is it? If not, why not? c) Are there difficulties in adhering to the policies? If yes, what are they? d) How are the environmental and social policies communicated? Who is responsible for managing environmental and social issues?

5. CONSTRAINTS: What were the major difficulties, if any, that your organization encountered in developing the policies? How did you overcome those difficulties?

6. VALUE: Please rank the importance you ascribe to the environmental and social policies developed. (Note: answers will be quantified, for example, as high, medium, low, in a 3-point or 5-point ranking). Please explain the reason for your choice.

SECTION B: IMPLEMENTATION – MOVING FROM POLICY TO PRACTICE

7. MANAGEMENT: How have policies been translated into practice at different levels in your organization? Have any changes been made over time in managing this? If yes, please explain.

8. PRACTICAL HURDLES: What have been the major hurdles to your organization putting into practice your environmental and social policies? (Note: answers will be categorized according to their type, such as economic, competitive, industry specific, political, cultural and technical.) Do you have any examples to illustrate your comments?

9. TESTING/MONITORING: How do you know the extent to which the policies as described are being adhered to? (Note: are there any internal or external monitoring and reporting devices? How do you know if a policy is helping or hindering the achievement of an objective?

10. SUCCESS: Where has your organization been most effective in translating your policies into practice? Can you give examples?

11. LEARNING: Where has your organization been the most disappointed in translating policies into practice? Can you give examples?

12. ORGANIZATIONAL COVERAGE: Are there specific problems associated with ensuring coverage within the organization of policies adopted by the home office? If yes, was your organization able to identify and implement any solutions?

13. PARTNER DEMANDS: Has there been any impact with your partners (lenders, governments, international agencies, sub-contractors, etc.) resulting from having adopted environmental and social policies? Is yes, please explain.

14. SITE DEMANDS: Is there any difference in the way your organization operates, in terms of environmental, social, community relations or safety, between projects in your home country and those in other countries? Is there an industry standard that is followed?

15. SELF-ASSESSMENT OF RESULTS: Please rate your organization in terms of its environmental and social policies and activities: a) from your perspective, b) as seen by the industry. (Note: a rating scale will be established of 3 or 5 values.)

SECTION C: PRESENT AND POTENTIAL ROLE OF THE WORLD BANK GROUP

16. AWARENESS: Have you ever heard of the guidelines used by the WBG, such as the "Safeguard Policies" or the "Pollution Abatement Handbook?" If yes, where did you first hear about them? What are they? Have you ever consulted the WBG for information about environmental and social policies or programs?

17. EFFECTIVENESS OF MODEL: If you answered "yes" to Question No. 16, did your organization consult the WBG in the formulation of environmental and social policies or the implementation of activities? If yes, please rate the quality of the assistance provided. If no, please explain your answer.

18. MODEL: In your view, what is the industry view of the WBG in terms of its impact on companies adopting environmental and social policies and activities? (a list of potential answers will be included for the respondent to check as the most appropriate). Please explain why you selected the answer. Is there another organization (including an industry "leader" or association) that you would consider more effective in helping extractive companies adopt environmental and social policies and practices? If yes, please explain.

19. ASSISTANCE OVER TIME: Once your organization adopted its environmental and social policies, did you ask for, or receive, any assistance from the WBG? By assistance, please consider information received via the Internet, conferences on environmental and social issues, newsletters, documents or other forms of technical assistance from any WBG office.

20. FUNDING: What are the key funding sources for your organization in undertaking projects in the developing world? Are there any types of activities that would assist your organization improve its environmental and social policies and activities for which funding is not available? If yes, please indicate where you believe further assistance could be provided.

21. PARTNERING: If your organization were given the option of collaborating with the following organizations to improve environmental and social policies and practices, where would you go to get assistance? For example, would you approach the WBG, a private lender, an Export Credit Agency, an NGO, a larger company, a government agency, etc.? Please explain your answer.

22. FUTURE: If you were to look 5 years down the road, what do you think your organization will be doing in terms of social and environmental policies and programs? What do you think the extractive industry will be doing? Will the WBG be a key player?

23. IDEAS: Do you have any ideas or suggestions to accelerate the adoption of Best Practices of environmental and social policies and programs in the extractive industry that have not been discussed in this interview or included in this questionnaire?

The interview guide and sample questionnaire proposed above are intended to be administered and analyzed within the period remaining for the Extractive Industry Review Secretariat to prepare its final reports. The illustrative questions above are intended to guide and facilitate that process so that the findings and recommendations in Phase Two can be disseminated widely and lessons learned incorporated into future WBG programs.

ANNEX A

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In addition to the above references, numerous websites were consulted, including those of all the extractive and financial organizations assessed in this report, as well as the websites of the Extractive Industries Review, IFC, World Bank, OECD, UNEP and various industry, trade associations, NGO, and media websites covering the economic, environmental and social aspects of the extractive and financial sectors.

ANNEX B

SELECTED STATEMENTS OF POLICIES AND PRINCIPLES

(Sources: Company Websites)

Hecla Mining Company [Mining]
Environmental Policy

Hecla Mining Company's activities will be conducted in a manner that minimizes risk to public health and safety. Further, Hecla believes that natural resources can be developed and utilized in a manner consistent with proper stewardship for the environment. Therefore, recognizing that all activities associated with the development of our mineral resources impact the environment, our projects will be designed and managed to reasonably minimize risk and mitigate negative impacts to the environment. Hecla will strive to assure that its activities are conducted in compliance with the applicable laws and regulations.

Principles:

- Utilization of the earth's natural resources is fundamental to the survival and prosperity of any organism or society, including man and his activities.
- Removal of natural resources from one environment to utilization in another will impact both environments to some degree.
- Individuals as well as organizations of individuals should demonstrate respect for and concern with our environment.
- Man, in his ability to provide stewardship to the environment, should strive to minimize or mitigate the impacts of resource utilization to the extent reasonably feasible.
- Sound science should be the basis of environmental impact evaluation and mitigation.
- Socioeconomic factors are a significant component of man's environment.

Implementation:

- Project planning, development and implementation will include consideration of alternatives and mitigation to reduce negative impacts to the environment. Costs for compliance with regulatory requirements, minimization and mitigation of environmental impacts, closure and reclamation will be included in project evaluations.
- Hecla will continue to seek, evaluate and use, when appropriate, new technologies and methodologies that enhance our ability to conduct our operations in a manner that reduces environmental impacts.
- To the extent economically and technically feasible, Hecla will minimize the generation of solid and hazardous wastes.
- Conservation of both renewable and nonrenewable natural resources will be considered in all of Hecla's activities.

- Hecla will continue its historic record of being community oriented. Socioeconomic factors will be included in the evaluation of all projects of significant capital cost.
- Being a mining company over 100 years old, Hecla has the opportunity to enhance the environment at historically mined properties where problems exist; both public safety and environmental concerns will be addressed in managing these properties.
- In addition to the corporate-wide procedures for implementation of Hecla's environmental policy, the following procedures will be applied at its operations as well:

Compliance with environmental laws and regulations and minimization of environmental impacts rests with the operation. To implement the environmental policy of the Company, each operation will provide awareness training for employees, will maintain suitable staffing to address environmental requirements and will routinely evaluate the effectiveness of their environmental program.

In order to minimize the risk to the environment, due to the necessity of using hazardous substances such as chemicals and petroleum products in our mining activities, an emergency response plan will be developed and implemented for each active operation.

All operations will utilize management practices which minimize, to the extent feasible, environmental impacts of the operation.

Milpo Group [Mining]
Environmental Policy

Milpo believes in the importance of Environmental Compliance and pollution prevention; therefore, it has made a decision to protect it at all its mining units.

The following are the principles governing environmental policy:

1. Promote the continuous improvement of the processes by complying with environmental regulations, legal provisions or other types of requirements accepted by the organization.

2. Prevent pollution, reducing environmental impact in the processes.

3. Constantly review the environmental management system, enhancing it on an on-going basis.

4. In the site, develop a sense of awareness over the benefits obtained by men who live in a healthy environment.

5. Preach that in order to have a healthy environment one must take proper care of it.

6. Encourage the use of clean technology and non-polluting elements.

7. Highlight the fact that it is the mission of the company to protect the environment from pollution, so that it can be home to the development and life of individuals whose respect is fundamental for proper social order

Social Responsibility Policy

In the Milpo Group, we believe it is essential to be responsible and work for the welfare and development of our workers and of the communities in the area, simultaneous to our production activity.

To meet this goal we are guided by the following principles:

1. Have respect for the individual, his culture and his customs, with the commitment of integrating his objectives with corporate, local, regional and national objectives.

2. Permanently seek the welfare of the workers and their families through the efficiency of human development programs which will make it possible to improve their quality of life.

3. Acknowledge the communities located in the site of the company's mining activities, as well as the population in general, as valid spokespeople; in order to maintain an on-going process of communication and inquiries.

4. Have a commitment with the economic, social and sustained development through time, of the communities which are adjacent to the company's mining units, allowing them to improve on their quality of life.

5. Forge strategic alliances with social support institutions and organizations focusing on sustained development.

6. Underscore among the company's personnel the importance of social policies for sustained development, in order to improve on the quality of life at the same time that the company's corporate activities grow

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Emerald Energy [Oil & Gas]
Health Safety & Environment Policy

It remains the Group policy to conduct operations in a manner which protects people and property and which complies with all applicable legislation and standards. Emerald's objective is to ensure a safe working environment and to protect all those who may come into contact with its activities.

Group policy requires that business be conducted in a socially responsible and ethical manner promoting the preservation of the natural environment and the way of life of indigenous peoples. This is achieved through a systematic evaluation of any risks to the environment arising from the

Group's activities followed by appropriate protective action. Compliance with Emerald's policies is also required of contractors providing services to Group operations.

Marubeni Group [diversified company with Oil & Gas activities]
Environmental Policy

Basic Principle

Marubeni Group, aware of its responsibility as a good corporate citizen, will do its utmost to preserve the environmental well-being of the earth, while striving for the harmony and prosperity of human society.

Basic Policy

Considering the global nature and diversified business activities of the Marubeni Group, basic policy in connection with global environmental preservation related to Marubeni Group's activities shall be established as follows:

While undertaking business activities, environmental impacts will always be considered and efforts to reduce environmental risks, protect the environment and prevent pollution will be made.

1. International environmental guidelines and environmental laws and regulations related to the country concerned and local self-governing body etc. will be observed.

2. At the time new investment and business is commenced and new equipment introduced, the reduction of environmental impacts will be considered. This will be especially true for resource development projects where the preservation of the natural ecosystem and regional environment will be given great consideration and care.

3. In daily office work, green procurement, energy savings, resource savings, reduction of waste and improvement of business efficiency will be carried out.

4. Efforts to create goods, services and social systems related to protection and/or improvement of the environment will be made.

In line with the spirit of this Environmental Policy, efforts toward and continuous improvement of the environmental management system of the Marubeni Group shall be made.

All directors and employees shall be notified of this Environmental Policy and this Environmental Policy will also be made available to the public.

Newfield Exploration Company [Oil & Gas]
Environmental, Health and Safety Policy

Commitment

Newfield Exploration Company is committed to protecting the environment in which it conducts its business and the health and safety of its employees and the communities in which it operates. Each employee, contract consultant, and contractor whom we utilize has a responsibility to contribute to a safe and healthful workplace and protect the environment.

Compliance

Newfield Exploration Company will conduct its operations in compliance within both the spirit and the letter of applicable laws, regulations, and standards. Management will commit the funds, manpower and resources necessary to accomplish the objectives of this Environmental, Health, and Safety Policy. The failure of employees, contract consultants, and contractors to comply with applicable laws and regulations may result in disciplinary action, including termination of employment.

Performance

Newfield Exploration Company believes that environmental, health, and safety goals need not conflict with economic goals. Compliance with the Company's environmental, health, and safety policies is one area of accountability in evaluating employee, contract consultant, and contractor performance.

Programs

Newfield Exploration Company will institute programs utilizing modern technology, periodic health, safety, and environmental audits, waste and risk management and contingency planning to monitor and evaluate compliance efforts and reduce risks to employees and the environment.

Training

All employees will be made aware of the Company's commitment to this Environmental, Health, and Safety Policy. To ensure compliance with applicable environmental, health, and safety laws and regulations, Newfield Exploration Company will provide appropriate training programs for employees. Employees are encouraged to become involved in environmental, health, and safety issues.

Barclays PLC [private bank]
Environmental Impact Assessment Policy Statement (excerpts)

Barclays' Group Environmental Management Policy recognizes that our organization impacts on the environment in a variety of ways. We have a direct impact through the consumption of energy, paper or other resources in our daily business activities, and an indirect impact through association with companies in our supply chain, and through the provision of finance for, or

investment in, businesses or projects which may themselves have a significant effect on the environment.

Barclays Environmental Impact Assessment (EIA) Policy ensures project finance proposals are rigorously assessed to identify, quantify and, where appropriate, mitigate the environmental impacts surrounding these proposals.

The EIA policy is applied worldwide across the Barclays Group, and provides a structured framework through which the potential environmental impacts of a project are assessed, options are evaluated, and appropriate actions to be taken in mitigation of projects is identified. The Policy includes consideration of the management and on-going monitoring of the project. An EIA takes into account the natural environment (air, water, land); biodiversity; human health and safety; social aspects (e.g. involuntary resettlement, indigenous peoples' culture and heritage); and international transboundary aspects.

Barclays EIA Policy:

- Requires the EIA to be undertaken, or independently reviewed, by an appropriately qualified specialist, whose experience and credentials are acceptable to Barclays…
- Determines the terms of reference to which the EIA should conform, to ensure the assessment has sufficient scope and detail to allow us to make lending decisions from an informed viewpoint, given that each project is likely to demonstrate a complex and unique environmental profile.
- Requires all environmental issues to be addressed in accordance with internationally recognized standards (e.g. World Bank standards), ensuring Barclays is associated with only those projects which meet high environmental standards.
- Enables Barclays to balance stakeholders' interests, issues and concerns which arise from environmentally sensitive projects…

Policy Benefits:

- Project finance propositions are assessed in a consistent and professional manner in all the Group's areas and countries of operation, and against all applicable legislation…
- Business areas are equipped at an early stage with relevant guidance to influence proactively the environmental due diligence conducted…
- Project finance propositions are assessed against internationally recognized project standards.
- Barclays is aware of the sensitivities surrounding certain types of projects, and will only proceed when satisfied that the environmental impacts have been properly identified, can be satisfactorily mitigated, and are being managed in accordance with stringent environmental criteria (e.g. attainment of World Bank standards is a minimum as a general rule).

(Policy introduced in 1997 and reviewed annually)

Export Development Canada (Export Credit Agency]
Business Code of Ethics (excerpts)

Commitment to Legal and Ethical Conduct

EDC will conduct its business and affairs in accordance with the letter and spirit of all applicable laws in the countries in which it does business. If any EDC employee or representative is ever uncertain as to the interpretation or application of a particular law, he or she must seek advice from Legal Services before taking action. Compliance with the law may, however, fall short of the standard of ethical conduct expected by EDC.

The Environment

In considering transactions, EDC examines environmental risk along with any other risk. EDC is developing its own environmental assessment framework in consultation with Canadian exporters, environmental organizations and other stakeholders. This framework will support EDC's desire to conserve and enhance environmental quality and to advocate concern for the environmental impact of projects it supports in foreign jurisdictions. EDC will encourage best practices among those with whom it does business, with the aim of raising international environmental standards. EDC will strive for high standards of environmental conservation while ensuring this does not unduly hinder EDC's ability to support Canadian exporters to compete on a global scale.

Human Rights

EDC values human rights and promotes the protection of internationally recognized human rights, consistent with the policies of the government of Canada. EDC recognizes the sovereignty of other national governments when there is consistency with the policies of the government of Canada.

EDC employees, representatives and other stakeholders are entitled to have their dignity as human beings respected and to work in an environment free from intimidation, hostility or offensiveness. EDC is therefore committed to creating and maintaining a work and business environment that is free from harassment and discrimination on prohibited grounds. These prohibited grounds include: age, race, colour, religion, creed, sex, nationality, ethnic or place of origin, citizenship, language, political belief, marital or family status, pregnancy, sexual orientation and disability.

ANNEX C

BACKGROUND INFORMATION ON RESEARCHERS

Richard Everett
AGC Senior Associate & Principal Author

Mr. Everett is a management consultant with over 15 years of experience working for private clients in the telecom, high tech, and financial services industries, and for bilateral multilateral development agencies, including USAID, UNICEF, and the African Development Bank. His areas of expertise include industry and market research and analysis, survey design and implementation, project management and evaluation, management training, strategic planning, new business development, marketing communications, public/private partnerships and alliances, and government relations.. Mr. Everett served as a government-appointed member of U.S. delegations to three UN conferences on telecom development and policy reforms. He also reported on Africa for U.S. and British media as a foreign correspondent based in West Africa for over four years.

Andrew Gilboy
AGC Senior Partner and Report Editor

Mr. Gilboy is an international development specialist with 28 years of professional experience in the planning, coordination and evaluation of donor assistance to developing countries, in particular in Africa. His work has included sector analyses and donor program reviews in connection with the development of strategic objective frameworks in education, human resource development and private-sector promotion. Since forming AGC with three other Africa specialists in 1996, Mr. Gilboy has developed socially-responsible field-based programs in partnership with several large mining companies working in Africa. As a trainer, he has designed and undertaken impact evaluations and performed organizational analyses for institutions seeking to improve performance through training and non-training interventions. Mr. Gilboy is fluent in English, French and Wolof, the *lingua franca* of Senegal and Gambia. He has worked throughout North and Sub-Saharan Africa, the Middle East and in Eastern Europe..

Alistair MacDonald
AGC Research Associate

Mr. MacDonald is an economic geographer and policy analyst with extensive background in the mining industry, specializing in analysis of corporate actors in the global mineral production system. He is the author of the MMSD report *Industry in Transition: A Profile of the North American Mining Sector*.

ANNEX D

PHASE ONE TERMS OF REFERENCE
for the
Comparative Analysis of the
"Impact of World Bank Group's Social And Environmental Policies on Extractive Companies and Financial Institutions"

Objectives

- Determine the extent to which the social and environmental policies of the WBG are reflected in the stated policies and practices of extractive companies and certain financial partners that have only an indirect relationship with the WBG
- Characterize the influences shaping the development of social and environmental policies of these same extractive companies and financial partners, which includes in particular determining the impact of the WBG on policy development

Scope of Activities/Approach

Research activities are broken into two phases, each corresponding to one of the project's objectives. The first phase centers round a comparative analysis of the social and environmental policies and guidelines of the WBG with corresponding policies, corporate values, and stated practices of five institutional components: oil companies, gas companies, mining companies, ECAs, and private financial partners to extractive projects. The second phase entails a survey of key informants and senior mangers within these five components as to perceived influences on social and environmental policy development and impact of the WBG in their development. This present proposal describes the activities and their levels of effort required and anticipated outputs for the first phase.

Phase 1: A Comparative Analysis of Social and Environmental Policies and Guidelines

Policies and Guidelines

Four levels of activity are proposed to complete the first phase. These include:

1. Mapping each of the five industry and financial sectors and developing methodology for selecting target organizations for study

2. Determining an appropriate method for comparing WBG social and environmental policies and guidelines with corresponding policies and values of target sectors and conducting comparisons accordingly

3. Developing and testing a survey of key informants and senior managers at target organizations for deployment in the second phase

4. Analyzing results and reporting findings of the first phase

1. Mapping and selecting target organizations

AGC researchers propose to map each of the five sectors and select target organizations based on criteria that will be refined for each sector based on its individual characteristics. There are, however, broad criteria that will direct the mapping and selection exercise, which are different for organizations in the extractive and financial sectors.

For extractive sector companies, these criteria include:

1. Industry corporations that have had only an indirect relationship to the WBG; they will not have been clients of either the IFC or MIGA nor will they have participated in WBG sponsored activities that deal with social and environmental corporate policies and practices

2. Industry corporations that play an integral role in the development of projects in their respective sectors in the four regions of interest to the EIR

The individual characteristics of each industry sector are such that researchers anticipate the need to refine selection criteria further after an examination of sector dynamics and levels of project development in the four target regions. For example, gas sector projects are typically infrastructure development projects led by regional or national governments with gas companies providing services or supplies at various stages of the project cycle or at various points in the supply-chain. This picture of project development differs greatly from typical mineral-extractive projects where smaller companies develop projects to a certain point in the mine cycle after which they are confided to larger companies better suited for later- stage development, construction, or actual extraction. In light of these differences, possible selection criteria for gas companies may center around the level of involvement in early-phase or up-stream activities, whereas selection criteria for mining companies may involve companies that both develop new projects and manage extractive operations.

Concerning the financial sector, AGC researchers propose to conduct a similar mapping exercise for private financial partners based on levels of support to extractive projects in the four regions of interest to the EIR. It must be noted, however, that not all extractive sectors avail themselves of private financial partners to the same extent or manner and, as with the industry sectors, final criteria will be refined in the course of mapping this sector.

Export credit agencies on the other hand are of limited number; within the OECD member countries, there are only 24. Given this relatively small number, researchers propose to examine a sampling, from one-quarter to half, of the total. A major selection criteria for ECAs will be whether the sponsoring country has historical experience with extractive projects. Again, further criteria will be developed after comprehensive review of ECA activities.

Table 1. Mapping and selecting target organizations

Mapping and selection activity	Anticipated level of effort in days
Oil sector	3
Gas sector	3
Mining sector	3
Private financial partners	3
Export credit agencies	3
Total	15

2. Comparison of social and environmental policies

The methodology for comparing WBG social and environmental policies with those of extractive companies and financial institutions will differ from that proposed above. The methodology will be relatively straightforward with regard to financial institutions as the purpose and application of their policies, to the extent they exist, are similar to those of the WBG. Extractive companies, however, can only be relied on to manifest their social and environmental values in mission statements, annual reports, investor packages, and specialized reports pertaining to social and environmental activities. In the course of this project, researchers will develop a suitable methodology for distilling the social and environmental values inherent in the WBG safeguard policies and guidelines and historical evolution of these policies in order to compare them with the values manifested by the companies.

For the purposes of determining the level of effort necessary to accomplish this activity, AGC has estimated the number of industry and financial targets likely to comprise an appropriate sampling within each sector.

Table 2. Comparison of social and environmental policies

Activity	Est. Number of Targets	Anticipated level of effort in days
Develop methodologies	N/A	2
Compare oil companies	25	5
Compare gas companies	25	5
Compare mining companies	25	5
Compare private financial partners	8	3
Compare export credit agencies	20	4
Total		**24**

3. Developing and testing survey instruments for Phase Two

With the results from Phase One, AGC researchers will be able to develop survey instruments with which to complete the second overall objective: to characterize the influences on social and environmental policy development of the target companies and financial institutions, notably by that of the WBG and others. Researchers will develop presentations of Phase One findings along with associated questions to which respondents can react. Additional questions will also be developed and tested to elicit information concerning influences on policy development. AGC estimates a level of effort of **4 days** to complete this activity.

4. Analyze results and report findings

Upon completion of Phase One, AGC will present the EIR with a report of findings and a set of developed and tested survey instruments ready for deployment in Phase Two. In addition, the report will contain questions to be asked at subsequent EIR workshops and other appropriate venues suggested by the EIR. AGC estimates that the final report will be approximately 50 pages in length, not including the Annexes. AGC estimates a level of effort of **10 days** to complete this activity.

5. Peer review

In accordance with World Bank guidelines for research projects, AGC will make arrangements with the EIR to identify two people to provide independent critical feedback to the research process at an interim point and during the preparation of the final report. The interim review will evaluate the success of the mapping/selection activity and comment on the methodology for conducting comparisons.

Activity Plan

The proposed research will take place over a twelve week period with activities broken down in the following fashion.

Table 3. Activity Plan

Activity	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12
1. Mapping of industry sectors and selecting target organizations												
2. Determine methodologies and conduct comparisons												
3. Develop and test survey instruments												
4. Analyze and report findings												
5. Peer review												

ADDENDUM TO TERMS OF REFERENCE

This addendum applies to a study executed by Associates for Global Change (AGC) for the World Bank Extractive Industries Review (EIR), entitled **"Impact of World Bank Group's Social and Environmental Policies on Extractive Companies and Financial Institutions.**"

This addendum to the TOR of the above-mentioned study clarifies the scope and objectives of the study as described in the TOR. This addendum in no way changes the scope as was agreed upon between the World Bank Group, acting on behalf of the Extractive Industries Review, and the researchers, Associates for Global Change.

The entire EIR-funded study, "Impact of World Bank Group's Social and Environmental Policies on Extractive Companies and Financial Institutions," is designed to be completed via two separate contract actions. However, the Terms of Reference above include both objectives, repeated below, in order to ensure consistency in the two anticipated deliverables:

1. Determine the extent to which the social and environmental policies of the WBG are reflected in the stated policies and practices of extractive companies and certain financial partners who have only an indirect relationship with the WBG

2. Characterize the influences shaping the development of social and environmental policies of these same extractive companies and financial partners, which includes in particular determining the impact of the WBG on policy development

These two objectives reflect EIR's overall research interest, but only Objective No. 1 will be addressed by the research described in this TOR. However, AGC researchers will take into account EIR's interest in Objective No. 2 in undertaking the research and writing the report for Objective No. 1.