



Mining, Minerals and
Sustainable Development

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Report of the Workshop on Finance, Mining and Sustainability: Exploring Sound Investment Decision Processes

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the World Bank Group



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Preamble

MMSD in partnership with the World Bank and the United Nations Environment Program initiated a series of discussions about the role of financial markets in the search for improved environmental and social performance in the mining sector. One of the key questions for debate was 'is there a business case for financial institutions to take an interest in sustainable minerals development and if so, what is their role in promoting higher performance standards among their clients?'

The initiative began with two scoping meetings held in Washington in early 2001. The purpose of these meetings was to refine a broad ranging debate about the role of financial institutions into some key questions which were to become the focus for several pieces of research. The scoping meetings were attended by participants from government, industry, labour and civil society organisations from both developed and developing countries.

A follow-up workshop held in Washington in April 2001, sought support for a research agenda to evaluate the business case to warrant the interest of financial institutions in sustainable minerals development, to look at experiences and lessons learned with respect to governance around such issues as product certification, and to evaluate the role of indicators and management systems for measuring sustainability. The final workshop in Paris was the opportunity to discuss this and other research work and to extend the debate among participants from financial institutions governments, industry and others. This report records the proceedings of the conference

Background

The second in a series of Financing, Mining and Sustainability workshops explored the role of financial institutions in funding mining/minerals projects. Co-hosted by MMSD, UNEP and the World Bank, it was based on the following five themes:

- Sustainability performance in mining and its influence on the bottom line;
- Understanding, measuring and ensuring performance of sustainability in mining;
- Reputational issues and stakeholder perspectives;
- Moving ahead: what the finance sector needs from the mining industry;
- Framing a plan of action: effective sustainability reporting to meet the needs of the financial community.

The workshop took the form of plenary presentations, followed by breakout groups which discussed recommendations for next steps, and the specific roles MMSD, UNEP and the World Bank should take in the follow-up.

Recommendations

Key conclusions for follow-up

Participants identified the following as key recommendations for follow-up.

- **Establish a multi-stakeholder team**
Establish a team consisting of members from industry, banks, government and potential facilitators (NGOs) to put in place an action plan that can be adapted for use in both new and existing projects to help initiate and implement sustainable development programmes.
- **Guiding principles**
There is a need for a set of guiding principles for the sustainable development of mining projects from exploration to closure for all potential stakeholders, drawn up through a process of multi-stakeholder consultation.
- **A system of certification** needs to be developed, based on common principles of engagement, to avoid the splintering of certification into different self-interest factions such as those seen in forestry. The certification standard needs to be developed with input from all stakeholders.
- **Need for a standardised methodology for measuring social and economic performance of mining projects.** This requires both a minimum and a more advanced set of measurements.
- **Clarify objectives and roles**
The roles and objectives of different stakeholders, including financial institutions and government need to be clarified.
- **Clarify benefits of ‘pro-sustainable’ mining activities to financial institutions.**
- **Risks and benefits associated with good and practice vis a vis sustainable development need to be quantified and identified.**
- **Processes leading to sustainable practice need to be audited.** Financial institutions are principally interested in finance. Sustainability must be focused on the technical processes affecting the environment, and on establishing a three-way dialogue on social issues. A recommended set of procedures needs to be drawn up to enable these procedures to be audited.
- **Need for a top-down and bottom-up approach**
A bottom-up sustainability performance management system with tools such as indicators, partnerships, social investment/foundations etc. needs to work alongside a top-down sustainable investment code.
- **Balance between global standards and locally-specific standards**
The need for an industry standard seems to have broad acceptance. What seems more debatable is the appropriate balance between global standards or principles and locally-specific standards. More thought and discussion are needed about the different options suggested in the conference: e.g. sustainability performance management systems; building on ISO and World Bank guidelines and about the organisation that should manage the process.

What role could be played in the follow-up by the World Bank, UNEP and MMSD?

MMSD should...

- **Play a key facilitator role**, provoking debate and suggesting areas for further dialogue and research.
- **Engage different stakeholders** in the mining regions with the view to ensuring they are all involved in the development of standards for the sector. These are likely to take the form of a general set of principles agreed among all parties and adapted locally.
- **Disseminate findings** of the MMSD report to companies big and small, investors, NGOs and governments, and maintain regional discussions of the key issues.
- **Identify existing guidelines** and try to take them forward.
- **Help develop benchmarks** based on findings from best practice, that can be used to help participants in future sustainable development programmes to set clear objectives.
- **Help to develop a certification scheme** through engagement with stakeholders and key metals consumers.
- **Help translate good ideas into GMI policy.**

The World Bank should

- **Provide a framework** of funding for the implementation of sustainable development programmes.
- **Further develop international guidelines** incorporating sustainable development principles.
- **Listen more** to the voice of communities
- **Ensure transparency** to encourage ‘trickle down’.
- **Encourage tax solutions** rewarding mining companies investing some of the tax due into communities affected by their operations. This would encourage more community engagement and better understanding between the mining companies and their communities. This should be undertaken in collaboration with UNEP.
- **Promote capacity building** in host country institutions and civil society, and facilitate debate by providing rigorously documented case studies and thought-provoking papers. This will help inform decision-making that will ultimately benefit local communities.
- **Finance only projects** accepted by local communities with high social and environmental standards.
- **Address the issue** of corruption and listen more to community voices.

UNEP should

- **Maintain and strengthen** its role as a forum for debate, fostering understanding of sustainability issues with all stakeholders and the wider world, including the consumers

that create the demand for mining commodities, and developing tools associated with the identification and implementation of SDPs in the mining sector.

- **Support the necessary research** and training required to promote change.
- **Establish a working group** to develop procedure guidelines for key issues, and take a lead role in publishing and publicising these high level principles, ensuring that the wheel is not re-invented.
- **Continue the global PR** exercise to ensure that there is a greater understanding amongst governments of the process and its outcomes.
- **Channel learning from the UNEP Finance Initiative** into GMI and other mining meetings.
- **Assess the capacity** of both developed and developing countries to implement sustainable practices, and to address distributional issues.
- **Help identify the risks and benefits** associated with good/poor practice, providing case study details, and providing feedback on the efficiency or otherwise of sustainable development efforts.
- **Promote more actively a framework of sustainable development**, directed at the World Bank and other development banks, the mining companies, the export credit agencies and the private financial institutions.
- **Circulate best practice used in other international capital-intensive industries** such as oil and gas, chemicals, pulp and paper, where benchmark standards already exist. This should be undertaken in collaboration with the World Bank and MMSD.
- **Encourage tax solutions** rewarding mining companies investing some of the tax due into communities affected by their operations. This would encourage more community engagement and better understanding between the mining companies and their communities. This should be undertaken in collaboration with the World Bank and working with governments.

Welcome and Official Opening

Jacqueline Aloisi de Lardarel, Assistant Executive Director, UNEP

UNEP seeks to provide analyses of worldwide environmental conditions and trends, and the policy instruments available to address them. In the context of mining, UNEP's goal is to ensure that established environmental and social targets are met through the full array of regulatory measures, economic incentives and voluntary initiatives, by working with all stakeholders including the mining industry.

UNEP works both nationally and internationally, and has been active in promoting voluntary initiatives with the private sector. Recent work has been with the telecommunications, tourism, banking and insurance industries. Helping with the implementation of conventions and supporting the development of voluntary initiatives is another of UNEP's key functions.

On the issue of finance and sustainability, UNEP is charged with building consensus and finding solutions on two fronts: environmental law; and working in the field of chemicals. In particular this has involved work on mercury and developing a voluntary industry code for cyanide management in gold mining.

Of particular relevance to this meeting are mining and finance. In the area of mining, UNEP is concerned with both environmental and social issues, including human rights, labour rights and corruption. The emphasis is on the exchange of information and developing good practice in the sector.

Since 1992 when the EU became a reality, UNEP has been involved in developing a finance initiative which aims to strengthen the commitment of financial institutions to managing their environmental liabilities more effectively through good practice. To date there are 275 signatories including 180 banks and 80 insurance companies. Since 1995 the finance initiative has been further developed to include an insurance initiative. During the course of this work attempts have been made to address what finance for the mining sector means; and how the signed agreement might be implemented. Such questions are addressed in the 2001 report, due to be published soon.

The main purpose of this workshop is to examine the key criteria determining how banks invest in mining activities. Very often mining operations take place in protected and socially sensitive areas. UNEP would like to see such issues addressed through a process of consultation involving all stakeholders including government

UNEP is in charge of preparing 22 sector reports for the World Summit. These review the work done since Rio, identifying the main gaps and suggesting the next steps. Because of the MMSD process, the mining industry is not part of this effort. While some progress has been made, there is still much to be done.

James Bond, Director Mining Department, World Bank International Finance Corporation (WB/IFC)

The World Bank has played a key role in launching discussion on the relationship between the mining and financial sectors. The aim during this workshop is to move towards something more tangible. The mining sector is at the forefront of some of the most intractable problems faced by the World Bank in its interaction with different stakeholders. The World Bank began its work by engaging first with governments, and subsequently with the private sector. The involvement of civil society, including community based organisations (CBOs), local communities, cooperatives and the many other ways individuals organise themselves, is an important part of this equation in terms of achieving the goal of reducing poverty.

Every year the World Bank IFC finances eight green field projects, although this year has been the exception. Achieving mining investments that contribute financially to lenders, to governments (through tax revenue) and to local communities who want to see long-term tangible improvements in their lives is the role of the World Bank. It is now moving towards developing sustainability initiatives with the aim of setting a target beyond which investors have to perform in order to be able to access IFC financing.

However, there is also a need to go beyond a regulatory approach to a risk-return approach to sustainability that rewards operators with a good record on sustainability. The financial sector is good at matching risks with pricing, but does not do so well in the area of environment or the mining sector. The mining sector is unique in the sense that it does not differentiate between companies with good or bad environmental records. There is a need to improve the efficiency of financial reporting mechanisms in a way that allows financial markets to do the job they are best at doing. By considering mechanisms such as codes and assurance schemes aimed at improving the flow of financial information, mining companies with good records will be able to access cheaper capital and the financial sector will benefit from improved efficiency.

Luke Danielson, Director, MMSD

There are a number of issues arising from this discussion, in particular the need to reach a shared understanding in order to put in place a set of rules. In the absence of strong governing institutions, particularly in remote areas, it is extremely difficult to bring people from around the world to a common platform where their different approaches might converge. The key issue that needs to be addressed during this workshop is how to create such a platform: we cannot expect this to be a natural outcome of the process.

Another issue concerns the decision-making process, which tends to assess mining impacts in terms of up-front criteria such as environmental impact assessments (EIAs). The only way to evaluate the contribution of mining is to ask whether people, the community or the environment is better off when mining activities cease. It is difficult to assess this solely on the basis of 'up-front' criteria.

Three main objectives of this workshop have been identified:

1. To assess the reaction to the work of UNEP, the World Bank and MMSD, and identify areas where gaps remain;
2. To identify the short- and medium-term 'doables'. What is realistic and what cannot be done to move things forward. This should be seen as part of a long-term process of improvement.
3. To identify the next steps.

Plenary I: Sustainability – What Does it Mean for Mining?

Sustainability and economics – what does the future hold?

Phillip Crowson

Crowson subscribes to the views and position expressed by Professor David Henderson, former chief economist of OECD, in that sustainable development is neither well-defined, nor above criticism. Crowson challenges the economic, social and environmental dimensions said to underpin the concept of sustainable development, linking the

environmental aspect to alarmist consensus and the social aspect to narrow interpretations of 'social justice' which focus on perceived inequalities and victims. From this perspective, Crowson views sustainable development as a way of dressing up 'new millennium collectivism' and describes himself as an 'agnostic' to this way of thinking.

Mining and sustainability

There are important aspects to this debate which Crowson believes financiers of mining projects need to bear in mind. While the mining of non-renewable resources cannot be regarded as sustainable, he asserts that a wider definition should not lead to a restriction of mining, but act as a safeguard against wasting the earth's resources. To accept that mines are finite, however, does not rule out the need for the mining industry to behave as a responsible steward of the earth's resources.

Crowson argues that keeping minerals in the ground is not sustainable development, but no development. An assessment of the need for minerals is critical to understanding how the wealth created by mining contributes to social and economic development, enabling populations to improve their living standards and the means to sustain future generations.

However, it is acknowledged that the need for minerals is not easily predictable, and is determined by technological change and evolving relationships between cost and consumption in end-use markets. In the past, technical progress ensured that the price of mineral products did not rise inexorably in real terms, but in many cases remained static or even declined over long periods. Crowson believes that there remains plenty of scope for lowering costs and raising the productivity of the world's mineral resources over the coming decades. This assumption is based on existing technology, and improvements in technology that he believes will undoubtedly occur.

Mining as an economic activity

Much confusion exists between objectives and constraints. Mining companies are in the business of earning profits, and carry out their operations in the face of a wide variety of constraints set by a range of different actors. While there is a role for mining companies in trying to influence the form and nature of these constraints, Crowson acknowledges that they should not confuse this with their objectives, nor seek to impose their own views of constraints on other companies.

The economic rent of mining

Until they are discovered and developed all deposits are essentially worthless. Mining generates genuine wealth which enables the extraction of economic rents. This revenue can be used to support present consumption, as well as being invested in human and physical capital to improve living standards and enhance development opportunities for future generations.

The economic rent of mining is the value of the product less all the direct and indirect costs of production, including the minimum return to capital required to make an investor commit funds in the first place. Alternatively, it can be used to describe the reward derived from possessing a property, as distinct from the compensation required for all the various factors of production used to develop it. No matter how it is adopted, a sustainable

development approach to mining is essentially concerned with the definition and distribution of economic rents.

Using the definition of revenues less all costs, mining companies effectively destroy value if they fail to cover all costs incurred during the life cycle of a project. These costs include not only operational costs, but also less tangible ones. Some governments and landowners base royalties on the volume or value of production. Such costs can be seen as part of a mine's economic rent, since they are over and above the general corporate incomes taxes already paid as part of the required minimum return on capital. Investors need to allow for the opportunity cost of their investment in any project. In the mining industry, the opportunity cost is generally much higher than the yield on government bonds in order to allow for relative risks.

When looked at globally, the costs of mining include the depletion of the underlying ore body, which is an irreplaceable asset. This is more important for the fuel minerals, like coal, and for many industrial minerals than for metals. Mineral development first creates an asset of ore in the ground and then turns it into a more negotiable asset of a mineral or metal with specific markets and end-uses. A large proportion of metallic products, and of some industrial minerals and construction materials, is eventually re-cycled. The capital stock has merely altered its form. Most analyses of the importance of recycling compare the amount of a product that is produced from recycled materials with today's production or use. The correct comparison, however, in a world whose demand rises annually, is with the amount of material from which the present recycled portion comes. Simplistically that is the cumulative historic production, or more accurately, the production of the years in which the recycled products were made. As long as demand continues to expand it is doubtful whether recycling will account for a significantly higher share of present use than it does today, for a variety of sound economic and technical reasons.

The costs that have to be covered naturally incorporate the costs of meeting sound environmental standards that are fully appropriate and acceptable for the area in which the mine is located. Those costs are not always fully internalised. To the extent that a mining company over-provides in its environmental costs, it is dissipating part of the prospective economic rent that can be used to meet the needs of future generations. It follows from this that economic rent can never be estimated independently of time or place. This is not the same as saying that mining companies should only meet the environmental regulations presently in force in any region, no matter how lax they might be. Different environments do have different absorptive capacities, however, and it is both wasteful and economically inefficient to require all mines to meet the needs of the most sensitive areas. Due account has to be taken of all the costs of final closure, including any necessary rehabilitation of the mine site and associated facilities. These costs may be incurred many years after mine start-up, when the original operating company may have long since ceased to exist.

The different costs of mining a given ore are incurred at different stages in the life of a mine, as are the revenues. Strictly speaking, the true rent of a mine can only be properly assessed in hindsight when the ore deposit is finally depleted. Most projects are based on highly conservative estimates of ore reserves that seldom allow for the impact of future technical progress. The relevant discount rate for assessing a project's economic rent is unlikely to be

either the company's opportunity cost of capital, or its own rate of return yardstick. Some social rate of discount should be employed, probably in the 2-4% range.

The rate of return in base metal mining has not covered opportunity costs of its capital. This lack of sustainability has been demonstrated through the abysmal performance of mining company shares. Since 1979, the relative value of mining shares has fallen to below one-fifth of its original value, and has approximately halved since the 1990s. It seems strange, therefore, that not more management time is concerned with improving levels of profitability. Unless the industry's inherent profitability is improved, it is somewhat premature to talk of its economic future, sustainable or otherwise. It might be argued that weak financial profitability has co-existed with the capture of economic rents by governments through taxation, local communities through onerous planning and environmental regulations, labour through bidding up wages, or consumers through unjustifiably weak prices. There is little evidence for the three former on a global basis, although there is a case for saying that product prices have been too low.

The narrow perspectives of financial organisations have tended to reinforce the failings of mining companies. Where they lend money, their main concern is to ensure that their loans are safe and are repaid on schedule. Lenders have tended to concentrate on a project's relative cash costs. Yet covering cash costs does not necessarily mean a profitable project. There is the need to earn at least the opportunity cost of the invested capital. The concentration of cash operating costs as a yardstick tends to encourage the pursuit of technical economies of scale. After all, the larger the mine, the greater the output over which fixed costs can be spread. This has had the effect of making the environmental footprint and social impact of each mine much greater, possibly even than the sum of several smaller mines. The more economies of scale are exploited, the more inflexible becomes the mine's output. It needs to produce to capacity in order to cover its fixed costs, even when markets are depressed.

Much greater attention to true profitability would enhance the sustainability of mining. It would also be in the financial institution's long term interests because it would improve mining companies' overall share performance. A concentration on short-term performance measures by financial institutions has been another problem for the mining industry – which should be operating on a time span measured in years or even decades. To the extent that mining companies fail to cover their full costs, taking one year with another, investment eventually dries up and depleted capacity is not replaced. A cash-starved industry becomes unable to do much more than operate on a hand-to-mouth basis, paying little heed to the long-run future, because it cannot envisage the long term.

Unlike most other industries, the mining industry is geographically tied to specific sites, and has borne the full brunt of changes in political philosophy and national policies. Over the past two decades there has been a near-universal move towards liberalising markets and investment and attracting foreign investment. Existing state-owned companies, nationalised during the previous swing of the pendulum, have been sold off into private hands, and the tax and regulatory regimes facing mining greatly liberalised. However, most host countries are only interested in global liberalisation or market mechanisms as long as they achieve national objectives, which in turn are strongly influenced by domestic public opinion and by local interest groups. As long as mining projects produce adequate revenues for national

exchequers, and provide incomes, employment and trade, they will be accepted. To the extent that this price is not paid, then companies will face ever tightening constraints on their freedom of operations, and on their profitability. If mining companies and their financiers fully recognise the true costs incurred in mining and the true value of a mining project's economic rent, they will be adequately meeting their environmental responsibilities and the needs of the future. A failure to do so invites hostility and retaliatory action that will eventually result in lowered profits for shareholders.

Conclusion

The primary role of mining companies is, and always will be, to concentrate on extracting the maximum long-term value from the ore deposits in their stewardship. Financial institutions need to be fully aware of the constraints set both legally, and by best practice, and to encourage companies to abide by them in order both to secure long-term profitability and to minimise any needless reputational risk.

Discussion

- The view that deposits are worthless until they are developed was challenged. It was argued that they can be seen in much the same way as gold deposits contained in bank vaults, and have the potential of contributing to the sustainability of a country. For Crowson however, it does not necessarily follow that a deposit in the ground will be valuable in the future, as future needs cannot be forecasted. From this line of reasoning it follows that the value of a deposit depends only on its present economic viability. History shows us that patterns of demand for minerals change over time e.g. deposits of flint in East Anglia.
- There is a tendency to look at cash costs and not the full costs of the mining sector. Imposing standards are seen to equal barriers to entry. Crowson pointed out that barriers to entry are not necessarily economically justifiable. In other words, they may be the wrong sort of barrier. He argues that standards should not be imposed on mining companies.
- To what extent is it incumbent on mining companies to internalise costs? Crowson argued that it should be the job of society to ensure that costs are internalised as far as possible.

Finance, mining and sustainability: an insider's view

Profile of the Gamsberg zinc projet, South Africa; Simon Thompson, AngloAmerican

Project summary

- Deposit discovered in 1971
- AngloAmerican purchased 300 per cent interest in 1974, and increased interest to 100 per cent in 1998
- Feasibility study completed in 2000
- Estimated capital cost US\$900m
- Production: 300,000 t/y of zinc (4 per cent of global demand)
- Investment decision deferred due to market conditions

Social context

Located in Northern Cape, South Africa's least populous and poorest province. Fifty-one per cent of households live in poverty, and regional unemployment is over 65 per cent.

Environmental context

Gemsberg is an 'island' of succulent karoo vegetation surrounded by sandy, semi-arid Bushmanland plains, bounded to the north by the Orange River. Numerous Inselbergs ('island mountains'), supporting a rich variety of plant life, with over 340 plant species identified, including a large number of endemic plant species with one possible new species. The area has unusual climatic, geomorphological and soil conditions, and is protected from over-grazing. There are few existing conservation areas, and the area is highly vulnerable to climate change.

Socio-economic impact

Employment

- 5000+ jobs during construction
- 1000+ jobs during operations
- Significant multiplier effect
- Target for local recruitment: 70 per cent

Regional development

- Railway connecting region to major ports
- Improved power transmission and water supply
- Housing policy designed to encourage development within existing communities
- Upgraded health and educational facilities in partnership with local government
- Training and manpower development
- Bursaries for secondary and tertiary education
- Cost of future investment in region reduced by investment in infrastructure and workforce

SMEs

- All non core services will be outsourced
- Opportunities in small-scale farming, catering, laundry, security, small vehicle maintenance and tourism
- SME manager to assist with capacity building in local communities
- Business Trust – a partnership between the local community, local government and local business to provide seed capital, co-financed by the mine

Tourism

- Viewing platform overlooking pit
- Tours of refinery
- Displays of mining, local archaeology, botany
- Visitors' centre will provide focal point for information on regional tourist attractions
- Eco-tourism

National impact

- Estimated tax revenue US\$50m per annum

- Approximately 60 per cent of construction cost (US\$600m) will be used to acquire goods and services from South African suppliers, creating jobs and tax revenue
- Estimated foreign exchange earnings of US\$300m per annum

Major issues

- Influx of people
- Squatters
- Crime
- HIV/AIDS

Duration

- Estimated mine life – 33 years
- Long lifeline for industrial project
- Location in remote rural area means alternative employment opportunities are scarce and socio-economic impact of closure more pronounced
- Mine will provide 30+ year ‘window of opportunity’ for local communities to break the cycle of poverty
- But it needs to be part of a wider regional development plan

Minimising environmental impact

A number of steps have been taken to minimise the environmental impact:

- Consultation with the Wildlife Society, the Botanical Society and the Succulent Society
- The location of the open pit is determined by geology, but the location of all infrastructure has been selected to avoid areas of high biodiversity
- All mining activity is removed from south-facing slopes that support the greatest diversity of plant and animal life
- Efforts have been made to minimise the land area disturbed: 20 per cent of Inselberg has been directly impacted by mining; 80 per cent has been fenced to prevent access and conserve the habitat

Ex situ conservation

Through partnership with the National Botanical Institute, vulnerable plant species are to be removed from the mining area and relocated to specially created conservation areas at the National Botanical Institute Karoo Desert Gardens. In addition to conservation, the facility will encourage tourist and educational visits, providing insight into the flora of a rarely visited part of South Africa.

In situ conservation

Through partnership with WWF, a conservation area is to be established within Bushmanland with the aim of conserving the animal and plant species typical of the region. This will provide opportunities for eco-tourism and local employment, and will increase the conservation area in an under-conserved part of South Africa.

Major issues

- Plant habitats will be destroyed over the area of the mine and possibly a wider area
- Effective rehabilitation of waste rock dumps and tailings will be extremely problematic in an area with very low rainfall and virtually no topsoil

- The mine will leave an unsightly scar on the landscape for generations

Do the social and economic benefits of the project outweigh the environmental costs? Who decides?

Attitudes of interested and affected parties

- Local communities and organised labour overwhelmingly in favour of the project – mass demonstrations in support of the project
- Local and national government generally in favour
- Large farm owners opposed (mainly for social reasons)
- NGOs primarily concerned about the environmental impact – attitudes range from active engagement to mitigate the impacts, to aggressive opposition.

The role of financial institutions

- Financial institutions accustomed to evaluating the potential safety, health and environmental (SHE) liabilities
- Bad SHE management is bad business – a legitimate concern of financial institutions
- Increased reporting and transparency of financial institutions on SHE performance should assist the efficient allocation of capital, reducing the cost of capital for responsible mining
- Sustainability is a much broader concept involving the evaluation of complex trade-offs between social, economic and environmental costs and benefits
- It is not clear that financial institutions have the capacity or the mandate to judge sustainability
- The decision on whether a project contributes to sustainable development, and therefore, whether or not it should proceed, is essentially political, the role of (capable, ethical and democratic) government
- Building capacity in all stakeholders is a major challenge
- Unlike all other stakeholders, apart from government, financial institutions have an effective power of veto over whether or not a project proceeds
- Unlike government, financial institutions are neither democratic nor accountable for their actions
- In many cases, they are not even located in the same country as the project.

Discussion

- What is the definition of a financial institution? In this case the decision of how the project will be funded has not yet been taken. The point Thompson was trying to emphasise was that, if financial institutions are being asked to make sustainable development assessments rather than governments, what are the implications?
- In this presentation financial institutions were portrayed as being undemocratic with a lack of accountability. Is this not in fact an advantage, in that they merely have the profit motive behind them? Financial institutions should be looking at SHE, and should not be expected to go beyond this and make a judgement on the environmental/social cost of a project. Such issues should be tackled by other stakeholders.
- The question was raised as to whether governments or companies should be tackling issues of SHE. Sometimes there is no obvious government. The need to see the

question of property rights introduced into the discussion as early as possible was also highlighted.

Strengths and weaknesses of the mining industry – information required by investors

Aslak Skancke, Head Socially Responsible Investing Research, Storebrand

Storebrand is a leading Scandinavian financial services company dealing with investment management, pensions, life insurance and banking. It is one of the largest socially responsible investment specialists with 4.5 billion Euros under SRI management.

- It has offices in Oslo, Stockholm, London and Paris
- Pioneer of Best in Class SRI funds
- Co-founder and Chair of UNEP Insurance Industry Initiative
- WBCSD member
- NGO Cooperation with Amnesty International UK Business Group, Norwegian People's aid etc.
- Mutual fund venture with WWF Sweden

The importance of the mining industry

Society is heavily dependent on minerals and metals provided by the industry. From environmental and social perspectives, the industry has caused numerous problems, particularly mining of diamonds, gold and uranium.

From a global investor's perspective, the mining industry is small: mining companies represent a small portion of total investment; and most mining companies are relatively small. For example, in the Morgan Stanley Capital International World Index (MSCI-WI) the mining companies constitute 0.7 per cent of the total market capitalisation (Of 32 companies in all, only eight are above 0.02%).

Investment decision processes

Traditionally, investment decision processes have been influenced by factors such as short-term speculation in metals and raw materials; currency fluctuations; and economic trends (changes in demand, production capacity etc). Storebrand Investments typically takes relatively short-term positions in mining companies to take advantage of these factors.

The importance of objective information

Traditional investment analysts take very limited environmental, social and political considerations into account. Most investors, including Storebrand, generally assume that the companies' environmental, social and political risks are managed (and are reflected in the stock's prices). At the same time, many investors prefer to stay away from questionable mining companies because the risks are too great. However, when risk related issues arise, Storebrand's portfolio managers tend to be 'jumpy' and sell stocks quickly.

Development of the industry – some current trends

- The mining industry is complex and has operations in many developing economies.
- Mining companies are consolidating and becoming more international
- Increased focus on the role of multinational corporations in sustainability is one of the driving forces for improved reporting on environmental and social issues in the mining industry.

Storebrand's approach to socially responsible investments (SRIs)

Storebrand is a pioneer in Best in Class SRI Funds. Where some environmental/socially responsible funds may exclude 'problematic sectors' such as mining, Storebrand has taken a different approach. Recognising the need for products from the mining industry, Storebrand's SRI funds invest in mining companies that rank among the top 30% in their analysis of environmental and social criteria.

The Storebrand Triple Return™ is a system of financial, environmental and social reporting of portfolio investment performance, which mirrors the concept of triple bottom line at individual company level. It is based on a rigorous analysis of data from companies and other sources, including NGOs, consulting firms, industry organisations, media and others, which leads to a sustainability index, Environmental Returns™ and Social Returns™. Environmental Returns quantify the positive benefit that companies in the Storebrand Principle Funds bring. They show the savings in environmental pollution which the portfolio holdings contribute compare with the market average, and are based on six key criteria: global warming saving; ozone depletion saving; toxic release saving; material intensity saving; energy intensity saving; and water intensity saving.

Social Returns quantify the positive social benefit that companies in the Storebrand Principle Funds contribute compared with the market average.

Storebrand's environmental analysis of companies in the mining industry

Due to the heterogeneity of the mining sector, it is difficult to find a broad range of environmental criteria by which the sector can be gauged. Storebrand's environmental analysis of the mining companies is based on one indicator: environmental management.

Environmental management

This indicator covers environmental strategy and policy; environmental reporting; environmental management systems; and production and processes. Storebrand's analysis takes into account the whole system, including the documented results, implemented by a mining company to handle environmental challenges.

One factor influencing the development of companies' own environmental standards is the lack of stringent laws, regulations or enforcement mechanisms in some operating countries. In many cases, the company standards exceed those of the country. Homestake and Noranda are examples of companies with very good reporting policies. BHP Billiton is also very good in this area, but the company is excluded from the Storebrand Principle Funds because of involvement in uranium mining.

Storebrand's environmental analysis – findings 2001

Storebrand's environmental analysis of twelve companies in the mining industry has led to the following findings:

- ***Environmental policy and strategy:*** almost all mining companies analysed by Storebrand have realised the importance of establishing a policy framework;
- ***Environmental management systems (EMS):*** all analysed companies have implemented a form of EMS, of which approximately 50 per cent are based on – or consistent with – ISO 14001;
- ***Environmental reporting:*** the average mining company produces satisfactory environmental reports. Most reports contain clear descriptions of environmental policies, targets and site examples. However, few reports show trends on quantitative data;
- ***Production and processes:*** the Storebrand analysis favours companies that have indicated a serious commitment to both impact assessments before operations start and rehabilitation after site closure.

Storebrand's social analysis – findings 2001

- ***The level of engagement in social issues is highly dependent on geographical factors.*** Companies operating solely in Europe or North America tend not to mention this explicitly, but incorporate human rights and social elements into their codes of conduct;
- ***For companies active in less developed countries, the situation is different.*** The effects of establishing a mine can be substantial, and country legislation does not necessarily cover all human rights and social aspects. A human rights policy should both secure employees and the populations living in areas affected by its operations.
- ***Policy and strategy:*** the majority of companies analysed have developed policies that to varying degrees cover human rights issues;
- ***Scope: none of the analysed companies have third party certified management systems covering social or human rights issues.*** One company has a system in preparation and some other companies refer to their code of conduct or community relations' activities. None of the companies produce separate human rights reports;
- ***Practices: human rights or social assessments are not well established in the mining industry.*** Only two companies reported that they cover social or human rights issues within a broader assessment;
- ***Business partners, suppliers, contractors and sub-contractors (BP):*** none of the companies report having human rights related standards governing supplier and contractor activities, but the best in class encourage these groups to uphold the spirit of company policies.

Summary

- **Storebrand has found that reporting** from mining companies on environmental issues is much stronger than reporting on social issues;

- **Despite large risks, social policies and specific human rights** assessments are not fully developed, and human rights issues have not yet found their natural place in the corporate reporting structure;
- **‘Best in class’ environmental performance and considerations**, however, have been far-reaching – the proactive companies have policies, programmes and environmental management systems in place.

Recommendations

- ***The demand for SRI is increasing.*** Because of this investment companies will require more information on environmental and social issues;
- ***Use of a third party certified management system*** for social and human rights issues could improve reporting and credibility in this area;
- ***Increased reporting of quantitative environmental data*** (energy use, emissions, discharges etc) would make it easier to identify trends and quantify improvements;
- ***Environmental and social reporting in the mining sector*** have come further than in many other industry sectors, but given the potential impacts and risks, there is still much room for improvement.

Financial incentives for improved sustainability

Maryanne Grieg Gran, IIED/MMSD

The presentation began with four questions:

- Is it in the company’s financial interest to improve its environmental and social performance?
- Do financial markets recognise and reward such improvements?
- What are the barriers?
- What is needed to address the barriers?

The business case was put forward, looking in particular at the theoretical case, case studies of companies, and multi-company statistical studies, including accounting returns and financial market performance.

Advantages of sustainability

Cost:

- Clean technologies are more efficient
- Recycling reduces the cost of raw materials
- Good working conditions mean higher productivity and few disputes
- Preparation for regulatory change
- Reduced risk of compensation and damage suits

- Reduced cost of capital and insurance premiums
- Reduced transaction costs

Market advantages:

- Access to environmentally sensitive markets
- Secure higher prices for products
- Retain existing markets as they become more sustainability sensitive
- First mover advantages
- Investment in the 'survival economy'.

Reputation advantages

- Less risk of consumer boycotts
- Licence to operate: good relationships with regulators; and with the community
- Motivating factors for employees
- 'Insurance value' – more supportive responses from stakeholders if there is a problem
- Investor perceptions

The business case theory

According to the business case theory, the cost advantages outlined above are highly relevant to mining. The market advantages, however, are only relevant for niche products such as diamonds. The reputation advantages are most relevant for community relations and the ability to attract employees.

Case studies

Case studies are useful as an illustration of the potential benefits of addressing sustainability. However, they provide an incomplete picture of costs and benefits, and there are no positive case studies in mining – only negative ones. The following is a list of case studies that have been carried out:

Linking financial and environmental performance:

- Positive linkage: emissions efficiency against ROS, ROA and ROE (Hart and Ahuja, 1996)
- Negative linkage: emissions efficiency against net income, ROA, cashflow/equity ratio (Jaggi and Freedman, 1992)
- No positive linkage but no penalty (Cohen et al, 1997)
- No significant linkage: CO² Energy use, water use and waste against ROA, ROE and earnings per share (Louche, 1998)

The link with CSR

- Positive linkage: financial performance rankings for companies with or without codes of ethics (Vershoo, 1998)
- Partially positive linkage: KLD rankings against ROA (Berman et al, 1999; Waddock and Graves, 1997)
- No linkage: CEO orientation to CSR against ROA (Aupperle et al .,1985)
- Financial performance leading CSR: fortune corporate reputation rankings against ROA, ROE and ROI (Preston and O'Bannon, 1997)

Case study evidence has a number of shortcomings:

- It is based on a limited set of sustainability issues
- Results are conflicting
- Case studies are based mainly in the US or on US operations
- There is limited evidence for external impacts, e.g. the environment
- The direction of causation is unclear
- It is not very relevant to mining challenges e.g. overseas operations

Do financial markets reward sustainability performance?

Surveys of financial institutions have tended to show more interest in commercial lending than in asset management; and in risks rather than opportunities.

Statistical studies of links between sustainability performance and financial market indicators have been based on the cost of capital; event studies; longer-term studies and hidden value/hidden cost studies.

Cost of capital studies:

Environmental performance and systematic risk:

- TRI emissions and environmental management system (Feldman et al. 1997)
- Superfund liability (Garber and Hammit, 1997)
- Evidence stronger for large companies

Reputation and perceived risk:

- Fortune AMAC reputation rankings (Srivastava et al., 1997)
- AMAC mainly driven by financial variables

Event studies:

- Strong evidence for US that environmental events affect company market value
- Also affects value of other companies
- Less conclusive outside of US e.g. Canada

- Social events less well studied – studies mainly on product recalls and law violation and not on ‘external’ social issues

Implications of the event studies:

- Investor response influenced by the context e.g. regulatory system
- Not clear whether decline in market value reflects losses incurred by company
- Does market reaction come too late?
- Will companies with systematic approaches to sustainability be rewarded?

Studies of ‘long’ term impact

- Four studies show evidence of a long-term link
- Emphasis on reputation and intangible asset value
- Strengths: one examines standards for non-US operations
- Main weaknesses: three address environment only; direction of causation unclear

Hidden value/hidden cost

- Most studies not in public domain
- One published study (WRI Repetto and Austin, 2000)
 - Forward-looking scenario approach
 - Assess company exposure to environmental risk
 - Differences between companies not reflected in their financial statements
 - Evidence of hidden costs
 - Financial analysts can benefit from addressing environmental issues

What are the barriers?

According to surveys of financial institutions, there is a lack of comparable data; difficulty of translating sustainability issues into financial terms; and the perception that environmental issues are not material to profitability.

Translating sustainability into financial terms:

- Not just a case of lack of information
- Forward-looking approach needed
- Subjectivity of assessing risks
- Provide a methodology
- But the mining sector is more challenging
- Scenarios of society’s expectations rather than just regulatory change

Demonstrating that sustainability issues are material:

- Needs more than better methods or data

- Empirical studies of the business case are not conclusive
- Address factors that drive the business case: regulation; reputation.

The role of regulation

Many studies of the business case imply regulatory action:

- The role of investors to environmental events depends on the nature of the regulatory system
- WRI scenarios focus on regulatory change
- Concerns about reputation relate to increased attention from the regulatory authority

The business case depends on the regulatory system and is not a substitute.

The role of reputation

- This is important where regulation is weak, although investors will only react if other stakeholders are likely to react and reputation loss is contagious
- Financial institutions may have a closer consumer connection than the mining sector
- Regulations on disclosure affect the extent of reputation contagion

Conclusions

- Financial institutions have an important role in leveraging change in the mining sector
- It is important not to rely too much on the business case
- It is necessary to create the right conditions:
 - Improvements in reporting necessary but not sufficient;
 - More effective enforcement of environmental and social regulation and company disclosure on risk management;
 - Greater transparency.

Discussion

- Q: Global standards do not exist and are difficult to define. From an investment company perspective it would be useful to see the usefulness of ISO norms.
A: While global standards are useful, for example, in setting an objective for minimising cyanide levels, this does not mean it is desirable to import standards developed for a mine in one place to another. Objectives need to be set locally.
- ISO standards are for management procedures, and huge gaps remain in the technological area. There is a need for technical auditors, and not just environmental consultants. Often technical issues do not get picked up simply by monitoring ISO standards.
- Q: For any given project, different financial institutions involved should have an agreement that environmental standards should be the same. The problem stems from different financial institutions employing different consultants. Is there any scope for consultancy firms to establish a common approach vis a vis the mining sector? Would financial institutions be happy with the same staff?
A: There is a need to determine what are the protocols for different consultants.

Plenary 2: How are standards and agreements used?

How standards and agreements are used in audits and independent verification

Mike Cambridge, Knight Piésold Ltd

The purpose of an audit is to verify compliance against a set of guidelines or standards. Such audits are undertaken for both statutory and non statutory purposes, either in a regulatory framework or as part of a voluntary system, to meet the needs of either compliance or permitting requirements.

The standards adopted during an audit depend on the purpose for which it is intended. In the mining industry, it is clear that the term 'standards' causes some confusion. There are ISO standards for auditing and for environmental management etc. which are adaptable to global application. However, the adoption of technical and scientific standards is less applicable to global use. Examples of current mining projects from around the world show the disparate environmental and social conditions, the very variability of which mitigates against the application of the same technical/scientific target or standard throughout the world. It is also clear that, though global standards are often discussed, such common levels do not exist. Indeed, the rules by which mines are permitted and financed are as varied as the geographical regions in which they exist. This begs the question of whether global standards are a realistic objective.

It is, however, recognised that some form of baseline principles would be of assistance to the financial institutes, and as a comparator for NGOs and governmental bodies alike, as the basis for assessing all mining projects. To this end a set of global objectives or principles would be more appropriate and more useful to all participating parties.

To achieve agreement of such principles, it is necessary to ensure that all parties in a mining project are committed to them. Some form of sanction is thus required. There are examples of regulatory systems which have proved successful in preventing the types of incident so damaging to the industry. The need for regulation of an audit process at all stages of mine development is exemplified by the recent studies of mine tailings dam failures which indicate that the predominant cause is inadequate management.

The perception of the industry is of being 'dumb, dirty and damaging' (Burke, 1999), and if this perception is to be changed, the industry must accept the principle of a minimum performance standard. All stakeholders should accept and sign up to a global set of principles which are transparent and generic. Specific site orientated technical and scientific standards will meet the local objectives of environmental and social impact mitigation. Enforced regulation by third party auditing will ensure that the local objectives are being met and the global principles are being adhered to. This will improve the image of mining and reassure the financing institutes such that much needed investment is returned to the industry.

Summary of conclusions

- Global standards do not exist and would be difficult to define
- Global objectives/principles would better meet the requirements of all parties
- Auditing, regulated as standard practice, needs standards against which to report; however, these could be local/site specific
- Competence of auditors is currently self regulated, but could be regulated if appropriate standards of experience can be defined
- Auditing of mines pre-production to ensure global objectives are achievable should be statutory
- Auditing during operation and post closure to ensure permit conditions are being met should be statutory
- A prescriptive approach will not necessarily achieve the agreed objectives and may increase environmental and social impacts
- The perception of the extractive industry is of the few poor performers, rather than of the responsible many
- The global economy needs the extractive industries to encourage investment and project development, and a change in perception is required by assuring environmental and social compliance
- Regulation to meet agreed objectives, not prescription, can provide all stakeholders with the comfort that appropriate standards will be and are being achieved.

Lessons learnt from governance structures of other industrial sectors: options for the mining industry

Ruth Nussbaum and Sophie Higman, ProForest

The first critical step is to identify the target audience for the scheme. Possibilities include the company itself or the industry; a specific target such as the financial sector; and a wide range including industry, government, NGOs and the public.

Components of a scheme

The standard defines what level of performance is acceptable providing the basis for the scheme;

The certification process verifies whether the standard is being met. The better the process the more reliable the verification;

Accreditation verifies that those carrying out the certification process are competent, thereby providing confidence in the results.

The standard

This contains two important features: content and credibility. The two are linked but not synonymous. Both depend on who develops and maintains the standard.

Content:

There are a number of things to consider:

- Management or performance based
- Requirements of existing standards, codes of practice and international agreements
- Technical and scientific data
- Experience

What are the priorities and expectations of the target audience?

Credibility of the standard

Depends on

- Content
- Ownership
- Development
 - who was involved in developing it, i.e. was development through single interest involvement, selected representatives, or through multi-stakeholder involvement?
 - how were decisions reached, i.e. single interest decision-making, limited input, voting, or consensus-based?

The certification process**Three types of audit:**

- First party – the company audits itself
- Second party – the company is audited by someone it has a relationship with (e.g. customer, bank)
- Third party – the company is audited by an independent organisation with which it has no pre-existing relationship.

Two important features:

- Technical process
- Credibility

As with standards, these are linked but not synonymous.

Key technical features include:

- Who carries out the audit?
- How is information collected (documents, field visits, consultation)
- What is the sample size?
- Who makes the final decision?

Credibility can be provided by a number of features, most importantly:

- An effective complaint and dispute resolution mechanism

- Provision of public information, both by the certifier and the company
- Accreditation

Accreditation

- Who should carry this out? – industry; national accreditation bodies; international accreditation bodies.
- Issues to consider:
 - Credibility
 - Technical competence including both auditing and industry experience
 - Geographical coverage

Conclusions

- Begin by defining the target audience thinking about the long-term as well as the immediate future;
- It is essential to ensure that the scheme is credible to the target audience
- The wider the target audience the more complex it is to achieve credibility
- Short cuts in the short term are often expensive and time consuming in the long term.

Discussion

- Q: How have companies that have met standards benefited, and why? And how have companies that have failed to meet standards been punished?
A: Probably the biggest beneficiaries have been financial institutions and buyers who wanted an ethical policy, as they have only had to refer to accreditation to make their decision. In the case of companies, the benefits have been derived from improving their management. In terms of losers, it has been sector-specific: those who did not comply have not been able to compete in the market place.
- Q: In forestry certification confers multiple benefits to companies. However, in mining, few are interested in buying metal that has been certified.
A: Mining companies need to consider this issue further.
- In forestry the key to certification lies in working with the end-users. In the mining industry there is a need to look at the big end-users interested in sustainable development. In Australia certification schemes are currently underway in which individual mines are being monitored to ensure that they are operating in a socially and environmentally sustainable manner.
- Q: What advice would you give in terms of setting a credible and accepted standard for all?
A: Ultimately, everyone has realised that the only way to come up with a standard that works is to involve the industry, NGOs and the government. The FSC had to work hard to bring on board different social groups. The key is to accept from the outset that all the different stakeholders need to be included and empowered.

What financial institutions would find useful: a banker's view of codes, standard agreements and independent verification

Milo Carver, Barclays

Financial institutions evaluate, measure and price risk. The risks pertaining to mining projects fall into two categories: financial risk evaluation; and non-financial risk evaluation.

It is important to realise that banks invest, and individuals sign off on an investment, which makes them accountable. Reputation risks are extremely important both for individuals and institutions.

Ultimately one is looking at differences between debt investment and equity investment. Debt investments generally receive returns. Returns are seen in terms of cash, and therefore sustainability is approached with a small 's'. Equity providers are concerned with how to achieve higher returns in the future.

Visibility and credibility are key. Standards must be meaningful, i.e. must deliver tangible results, and have to be consistently applied, e.g. the World Bank standard. Given that there is a plethora of standards, it is recognised that this is difficult to achieve. Standards are meaningless unless they are incorporated in an effective governance model, and integrated in local and regional structures.

Sustainability indicators and sustainability performance management

Alyson Warhurst, Mining and Energy Research Network, Warwick Business School

Indicators are just one of the tools that can promote sound investment decisions, but are inadequate as stand-alone mechanisms. Other tools include:

- Impact assessment
- Social accounting and indicators
- Sustainable reporting
- Auditing and verification
- Partnerships
- Dialogue
- CSI
- Capacity building
- Strategic integration

While policy, codes and standards promote reporting frameworks, ultimately it is corporate strategy and tailor-made approaches to SPMs and SIs that support sound investment decisions.

The new paradigm of corporate citizenship is being promoted at MERN, which now houses a Corporate Citizenship Unit. This runs collaborative programmes of network research and multi-disciplinary projects. It has an expanding PhD programme with industrial sponsorship and MBAs, and runs short courses TAGs and executive training.

Corporate citizenship: a new paradigm

Old paradigm

Polluter pays
Regulation and compliance
'Do no harm'
Crisis management
P.R.
Description
Regulatory drivers
Tangential

New paradigm

Rights and responsibilities
'Guarantee positive good'
Precautionary approaches
Social reporting
Indicators
Financial drivers
Strategic

From rights to responsibilities

- Gains emanating from the transformation of sub-surface capital (e.g. minerals) contribute more positively to sustainable development
- Proactive interpretation of environmental and social responsibility beyond legal obligations to employees and shareholders
- Products contribute to quality of life and well-being
- Sustainable performance management, sustainable indicators and sustainable reporting

Sustainable performance management

This involves:

- Impact assessment and effects anticipated and prevented
- Partnership approaches to stakeholder relations
- Stakeholder dialogue
- Social investment through foundations and community projects
- Professional development and training
- Social accounting, including indicators and target setting
- Reporting
- Auditing and verification/evaluation

Sustainable performance: management and strategic management

- Needs to be integrated into mainstream corporate strategy through coherent management frameworks
- Horizontally (CSR, HSE, HR, financial etc)
- Vertically (strategic)

Case study 1: Developing sustainable indicators for the UK non-ferrous metals industry

Aims of the project

- Develop a set of credible and meaningful indicators
- Design a framework to evaluate progress against relevant milestones
- Contribute to knowledge of the industry's achievements, and the contributions that metals make to society.

Outputs – products of the research

- Indicators that are:
 - Representative; practical; responsive to change; contribute to prediction; understandable; user-friendly; relevant; cost efficient; target-related; comparable.
- Groups of indicators:
 - *Environmental sustainability*: natural resource protection; environmental strategy; management of local environmental impacts;
 - *Economic sustainability*: sustainable economic performance; economic impacts of the industry; employment impacts of the industry;
 - *Social sustainability*: internal stakeholder relations; external stakeholder relations.
- Research analysis:
 - Systematic description of issues
 - Understanding stakeholder perceptions
 - Dialogue
 - Effective communication of progress
- Methodology
 - Stakeholder scoped
 - Expert derived
 - Live, not static
 - Adaptive

Future work

- Ongoing dialogue
- Ongoing development of indicators and frameworks
- Further development of the product use methodology
- Priorities and phasing
- ‘Trade offs’
- Enhancing participation
- Supply chain – upstream/downstream indicators
- Operationalising the indicator frameworks
- Scoring, auditing, reporting and identifying
- Communication

Case study 2: Social performance reporting: case study of the social accounting, auditing and verification process at Premier Oil

Premier Oil is a small UK oil company with around 750 employees and operations in Indonesia, Pakistan and Myanmar. It is very successful in exploration and has a committed CEO and management. It is also under constant scrutiny regarding its human rights performance.

Developing indicators

The process of developing indicators is important for a number of reasons: firstly, it suggests strategic options and targets; it contributes to an internal and collaborative learning process; it evaluates and communicates performance and creates a level playing field.

Phase 1 (2000/1): Methodology and strategy

This involved: issues scoping; stakeholder consultation leading to a framework of social sustainability indicators (SSIs); devising management tools; determining targets; devising a social performance management system.

Phase 2 (2001): Implementation

This involved operationalisation of the management system; management training; stakeholder consultation and social accounting; and case studies to show the achievement of targets.

Phase 3 (2002): Analysis and reporting

This involved an internal review, the setting of new targets with a 2002 report and stakeholder consultations.

Global social sustainability goals

- Social justice in the workplace
- Socially responsible external stakeholder relations
- Socially responsible engagement with government stakeholders pertaining to regulation, human rights and corporate citizenship.

Social performance management tools

- Activities and tools – targets
- Pilot employee survey
- Survey for human rights managers
- Survey at group level
- Audit and verification performance criteria

Embedding the social performance management system

- Integrate with strategic management system
- Management tools
- Regular target review
- Imaginative training: secondments to coaching
- Dialogue: active listening and effective communication
- Ongoing engagement: monitoring and collaboration
- Team performance contracts
- Workplans
- Communications and innovative web-based tools.

Case study 3: Audit and verification/evaluation

Objectives:

To audit the capacity of the social accountants; the process of the social framework and account; and the findings of the social account as stated.

Verification methods

- Inspection: examining documents, records etc.
- Enquiry: seeking to corroborate information;

- Observation: looking at a process being performed by others e.g. the observation of a focus group discussion.

Evaluation methods: standards

Social account framework:

- Identifying stakeholders
- Defining and reviewing values
- Identifying issues and indicators
- Determining process scope
- Selecting indicators
- Embedding the process

Social account

This involves collecting, analysing and reporting information.

Evaluation methods: principles

These include: inclusivity, completeness, materiality, regularity and timelines, reliability, accessibility, embeddedness and continuous improvement.

Summary – sustainability performance management and sound investment decisions

- Towards a social/sustainability licence to operate
- Public policy, national codes and standards provide a framework, but reporting alone is no guarantee
- Corporate strategy – CSR – makes the difference and effective management systems, pro-active capacity building and key sustainability performance management tools, if all in place, can promote and empower business to innovate and make the difference.
- Integration plus leadership = sound investment decision-making.

Discussion

- Q: Who is responsible for sustainable management issues, the mining company or the financial institution?

A: The process of allocating responsibility is seen as part of the investment process. It is important that this is determined at the beginning of the mining project as part of an effective management system. Where there are weaknesses with host governments, or difficulties in ensuring the distribution of rents, companies may decide to take on more responsibility. It is important to develop managerial practice indicators to help financial institutions see that the project will be efficiently and sustainably managed. How this plays out in practice needs to be properly evaluated by mining companies through a third party.

Governmental views on achieving sustainability

Keith Brewer, Dept of Natural Resources, Ottawa, Canada

Needs of private sector investment

In a global environment where metal prices have been dropping steadily and there has been a decrease in total equity financing for mineral exploration and development, private sector investment takes place under the following ideal conditions:

- The private sector determines the pace of mineral development;
- The government plays a complementary role;
- Rules and regulations are known in advance;
- A range of stakeholders are consulted on proposed modifications.

Government measures for economic sustainability

National instrument 43-101: standards of disclosures for mineral projects

- The purpose of this rule is to enhance the accuracy and integrity of disclosure in the mining sector;
- All scientific and technical disclosure to be based on information prepared by a 'qualified person';
- Developed by Canadian securities administrators; became law across Canada on February 1 2001.

What is the 'Qualified Person' concept?

- This is a regulatory concept, not a new title of licence;
- It means that only suitably qualified, regulated professionals are responsible for scientific and technical disclosure that is reported to the public market place;
- It brings the application of professional standards and responsibility into technical reports to the public.

Responsibility of a qualified person

- Adhere to professional and industry standards;
- Be involved in design and implementation of programmes;
- Review news releases reporting their work to ensure accuracy;
- Undertake a site visit;
- Adhere to exploration best practices;
- Data verification to be undertaken;
- Sign and seal the document;
- Provide a certificate in accordance with National Instrument 43-101;
- Consent: to filing and use of technical report; no reason to believe misrepresentation in disclosure from a technical report.

Government measures for environmental responsibility

Environmental regulations in Canada are recent developments. They include:

- Canada-wide Accord on Environmental Harmonisation;

- Federal-Provincial Agreements to Cooperate on Environmental Assessments;
- Federal Coordination Regulation and Guidelines for Panel Reviews.

Mine Reclamation Funds

- Mechanism
- Tax treatment
- Technologies to reduce the effects of acid drainage
- Government-industry consortium.

Government measures for social responsibility

- Impacts and Benefits Agreements
- An arrangement between company and local community
- Question as to whether payments to communities are tax deductible with the purposes of taxation.

Resorting to theory:

- Efficiency?
- How much environmental disruption?
- Compensation?

Resorting to consultation and negotiation?

- Who to consult with and why?
- Who to negotiate with?
- A lasting solution?

Conclusions

Need for enforceable property rights:

- Easier said than done
- Still a problem in a market economy
- More of a problem in other social structures.

Need for a collective approach to achieve global sustainability in mining

- Institutions/governments
- Discussions/consultations
- Analytical and informed decision-making
- Comprehensive due diligence.

Discussion

- Q: Is the investment of sole stewardship in indigenous communities the most appropriate way to ensure sustainable development? Are they best placed to manage this?

A: In Canada there are very strong provinces, and placing responsibility in the hands of indigenous peoples to manage their own resources has been a positive step. Capacity building is a very important element of this. However, it is important to note that

neither Canada nor the US have signed ILO Convention 169 which enshrines the right of consent for indigenous people before a mining project comes into operation.

Meaningful partnerships with government and local communities

Ligia Noronha, Tata Energy Research Institute, India

Why focus on trust?

Erosion of trust is the basis of the disaffection observed in mining regions, even if there is no explicit conflict situation. Trust creates real options for a company, building reputational capital because of the support that stakeholder groups provide.

‘The real economic value of a corporation increasingly comes not from the assets that it owns, or the employees that it supervises, but from the domain of trust it has established’, *The Economist* ‘The Future of the Company’, Dec 22 2001

What is trust?

- A relationship between at least two agents, in this case three;
- Based on goodwill for the other and assumes that the actions or decisions by either of the agents in the pursuit of their interests will favourably factor in the interests of the other, and
- Where the detrimental consequences of such pursuit is seen as arising from an error of judgement rather than from ill-intention;
- Trust is about recognising mutuality;
- The goal of a culture of trust is to move from ‘thin’ to ‘thick’ relationships.

From a company perspective, trust is the knowledge and belief that

- Its actions are seen in a positive light;
- Community orientated activities are perceived not to be mere PR exercises.

From a government perspective, trust exists if:

- Timely and correct royalty and other fiscal payments are made;
- Rules and regulations are observed;
- Environmental and social costs are being addressed.

From a local community perspective, trust exists if there is:

- Transparency in company actions and in methods of compensation payments;
- A genuine addressing of mine related environmental and social problems;
- Consistency in actions;
- No sense of collusion between companies and government bodies in matters that work to their detriment;
- A feeling that they have a stake in the resource, and not just as obstacles that need to be overcome in a race for it;
- Rule enforcement.

Thus the breakdown of trust in mining regions is linked, not only to company actions, but also to government non-actions.

The breakdown of trust can be seen as a management failure exposing the company to regulation risk and perceptions of poor corporate governance and a source of competitive disadvantage.

The domain of trust established can affect mining investments

- A government's decision to grant a licence to operate in a location;
- A community's 'informal' licence to operate;
- Media attention;
- A worker's decision to work with the company (leave the job);
- Access to finance if local conditions are seen to be hostile to the company.

Tri-sector partnerships

These are arrangements that allow the practice of trust where:

- Communication, commitment and continuous negotiation take place;
- The outcomes are beneficial and equitable to all concerned;
- Rights and responsibilities of the various stakeholders form the underlying 'perimeter' of the partnership.

Such partnerships will determine the shift from a thin to a thick relationship of trust through:

- Addressing the issues of concern to all stakeholders and not just members of the company;
- Moving the calculus beyond shareholder value towards stakeholder value by seeing mining activity not just in terms of profits, but as a means to improve the quality of life of the local communities;
- Improving relations with the local community and reducing tensions and conflicts within local communities.

And based on specific bridging mechanisms such as delivery of information; resources; formal governance structures and processes and programmes.

Preconditions for meaningful partnerships

- Empowering communities so that power asymmetries are reduced;
- Availability of social and environmental baseline information;
- Understanding local dynamics: community and government;
- A legal framework that provides effective voice to local and community interests;
- Measures to strengthen rule of law and good governance;
- A monitoring and evaluation system in place.

Typical issues of common concern that can be addressed in partnerships

- Land access and compensation;
- Transparency and community relations;
- Investment in environmental quality and impact;
- Health;
- Investment in human capital;
- Infrastructure needs.

Why partnerships – a company perspective

- Manage expectations from local community;
- Sources of insights, expertise, innovation;
- A middle ground for contentious issues;
- Reduced dependency;
- A better image;
- Less investment risk as hostility gets reduced and local reputation is enhanced;
- Cost savings-management time, production delays, etc.

A community and government perspective

- Provide a structure for stakeholder engagement;
- Enable programmes and action tailored to local and community needs;
- Provide a voice in the way resource rents are shared;
- Improve knowledge base about project;
- Create a sense of ownership and commitment to outcomes;
- Provide improved and faster delivery of benefits to community.

Potential risks

For companies

- Limits to goodwill and opening doors to those who may create problems;
- Higher direct costs of supporting partnerships;

For community and NGOs

- Loss of credibility and reputation with members, general public, funders;

For regulators

- Could turn out to be a diversion from its regulatory functions and reduced enforcement.

Challenges

- Stereotypical attitudes
- Corporate attitudes to valuing community resources
- High expectations from local community
- Conflicts with regard to representation
- Inconsistent actions and messages
- Unclear arrangements for effective functioning and responsibility;
- Maintaining shared control and voice;
- Inadequate resources.

Discussion

- Q: Is a lack of trust a result of a lack of education?
A: No, it is more a result of a lack of involvement than a lack of education. However, building capacity is part of the solution to improving trust.
- Q: Implicit in this presentation is that private enterprises do not behave responsibly. There are examples where they have done more than government.
A: I agree with this, and am no defender of the public sector. However such initiatives where companies consult with communities are relatively new and experimental, and need to be examined in this light. There is a need for more

informed debate, transparency, and capacity building to deal with this area adequately.

- There are currently no indicators for trust, and investment decisions need this information. An indicator for trust would be one element of sustainable development management systems.
- Q: How to identify legitimate stakeholders vs. outsiders? How is community defined, and how can the people within a community be empowered?
A: This is a very serious issue. The promise of revenues invariably leads to an increase in stakeholders. One way to overcome this is to hold a large number of focus groups to identify who has been around for a long time, and to discern patterns and enable communities to plan how to move forward.
- The issue of trust does not only concern companies and communities. There are other important stakeholders to consider, such as NGOs who often have a deeper appreciation of national and global concerns. The set of dynamics between companies and NGOs is different from that between companies and communities, and this highlights the need to take a more balanced approach to the issue of trust.

Breakout groups

Key discussion points

- **Different sectors in mining need to be differentiated.** For example, the formal and informal sectors; metals and aggregates;
- **Debt lenders and equity funders need to be differentiated,** though neither need have an interest in sustainable development.
- Financial institutions do not necessarily understand sustainable development issues, particularly in developing/emerging economies. There is a need to develop clear definitions of sustainable development in the mining context, and criteria to measure compliance.
- Links between socio-economic factors and financing of mining are poor;
- **Government responsibility for feedback tax.** Is it possible to reward mining companies for investing in local infrastructure? This is a difficult issue as it would involve intervening in the management of fiscal matters.
- **How to measure social performance?** Is it possible to develop economic indicators? Who is responsible for managing social issues?
- **NGO challenge. Mining companies are being challenged by NGOs not to operate in certain areas.** There is a responsibility for mining companies to identify the real concerns posed by a particular site before investing too much.
- Financial institutions will increasingly be subject to ‘carrot and stick’ approaches.
- **Risk assessment.** Mining is competing for investment with other sectors that are less risky. The mining industry therefore needs to justify its capability to minimise investment shocks that might occasion reputational risk for financial institutions.
- **Value-added sustainable development criteria are needed,** where benefits are spread more evenly across communities, investors and lenders.

- **To what extent should financial institutions impose their standards on less developed governments**, and to what extent should this be left to democratically elected governments? On the one hand, companies risk being accused of paternalism, on the other of negligence.
- **Is there a case for collective action amongst financial institutions?** If so, why has this not yet happened? What is the role of this kind of agreement, and how does it sit with notions of sovereignty and rights of government? Concern lies not with local mines that are financed locally, but with the parts of the industry that are financed globally. The desire for improvement by financial institutions is frustrated by global competition for investment, which drives performance down. The only way to progress is to have a common set of standards with government involvement.
- **System of standards needed** that are developed through a multi-stakeholder process, independently verified and have an in-built enforcement capability.

The recommendations arising from the breakout group discussions are highlighted under Key Recommendations on page 3.

Closing comments

The World Bank

Principles and guidelines can help the finance community function better. Having sustainable development standards is a good proxy for good management, which is enough for better pricing of risk. The World Bank has a clear role to play, and will continue to support the multi-stakeholder process.

The World Bank recognises the need to work harder to share knowledge, and are seeking to provide a series of short think pieces soon. It is grappling with transparency issues, and also looking into ways of addressing ‘trickle down’ with government help.

UNEP works with the finance sector both in terms of internal and external practices. Important changes are taking place after ten years. Initially there was no reporting requirement placed on institutions. Banks and financial institutions have now taken it upon themselves to submit annual reports on policy and practice. As they develop a template on annual reporting, they might build in a special component for mining. Over the course of this workshop, it became clear that UNEP finance initiatives need to work more closely with mining.

UNEP has been discussing the idea of creating a multi-stakeholder forum to bring together the various stakeholders and to facilitate debate between various regions under a global umbrella, whilst recognising that mining takes place in communities. Even though mining is a global industry, the development of a mine is very much a local issue. There are already a number of working groups in existence, with energy and water soon to become included as key issues.

MMSD

Installing the finance industry as the policeman of the mining industry is not what this initiative is about. Reputation, social licence etc. is about ensuring that finance is directed towards encouraging best performance. In bringing together this knowledge, we have to be clear about what information we need to encourage sustainable development in the mining sector. How do we decide what is relevant? There is a role for further research in this process.

Sustainability translates into costs for the sector. On the issue of trust, civil society is increasingly making demands on industry and funders. Sustainable development implies a repositioning of all actors.

In order to promote change, investment is needed. Who will pay to bring the existing bodies of knowledge together?

The other key issue is that of initiative overload. Too many initiatives have the effect of undermining the credibility of each.

Financial institutions are taking greater responsibility not to finance projects that do not comply with sustainable development principles. Perhaps sustainable development guidelines could become legal requirements. It might be more effective to promote change through incentives by lenders to those companies that behave responsibly, rather than through an industry forum.

Annex I – Agenda

January 14 2002

- 9:00** **Welcome & official opening**
J Jacqueline Aloisi de Lardarel, Assistant Executive Director, UNEP
James Bond, Director, Mining Department, World Bank-International
Finance Corporation (WB-IFC)
Luke Danielson, Director, MMSD
- 9:30** **Plenary 1: Sustainability – What does it mean for mining?**
Sustainability and Economics – what does the future hold?
Phillip Crowson
- Finance, mining and sustainability – an insider’s view**
Simon Thompson, AngloAmerican
- Strengths and weaknesses of the mining industry – information required by investors**
Aslak Skancke, Head of socially responsible investing research, Storebrand
- Financial incentives for improved sustainability**
Maryanne Grieg Gran, IIED/MMSD
- 14:30 -** **Plenary 2: How standards and agreements are used**
15:45
- How standards and agreements are used in audits and independent verification**
Mike Cambridge, Knight Piésold Consulting
- Lessons learnt from governance structures of other industrial sectors: options for the mining sector**
Ruth Nussbaum, Proforest
- What financial institutions would find useful: a banker’s view of codes, standards agreements and independent verification**
Milo Carver, Associate Director, Barclays
- Sustainability indicators and sustainability performance management**
Professor Alyson Warhurst, Director, Mining and Energy Research Network, Warwick Business School

15:15 – Breakout groups to discuss Session 2 issues
17:30

17:30 – Summary of Day 1
18:30

19:00 Reception

15 January 2002

9:00 – Plenary 3: Challenges for governments and communities
10:00

A view of governments

Dr Keith Brewer, Director General, Economic and fiscal analysis branch:
Minerals and metals, Natural Resources Canada

Meaningful partnerships with government and local communities

Ligia Noronha, Tata Energy Resesarch Institute, India

10:30 – Breakout groups to discuss Session 3 issues
11:15

11:15 – Plenary discussion
12:30

14:00 – Summary of Day 2 and general discussion on moving ahead: what
15:30 finance sector needs from the mining industry

15:30 – Plenary 4: Closing session
16:00 Conclusions, summary and recommendations