SUSTAINABILITY FOCUS

NOVEMBER 2013

MATERIALITY OF ESG RISKS IN THE MINING SECTOR

Barrick Gold Corp. had to suspend construction of its Pascua Lama mine in April 2013 after a Chilean court ruled in favour of four indigenous communities, who filed a complaint that the mine was threatening their water supply and polluting glaciers. The appeals court charged the Toronto-based mining company with "environmental irregularities" during construction of the gold and silver mine. In late May the project was handed a USD 16 million fine and another order to stop construction by the country's new environmental supervision agency (SMA) due to "serious" violations of the environmental permit. The suspension will remain in effect until the company addresses the problems and consults with the local indigenous group. A permanent ban could mean the project's end. Following reports of the court-ordered suspension of construction, Barrick's shares fell down to its lowest level since December 2008. In June 2013 US-based law firm Glancy Binkow & Goldberg has filed a class action lawsuit on behalf of all purchasers of Barrick Gold's common stock between May 7, 2009 and May 23, 2013. The suit charges Barrick and certain executives of SEC violations related to alleged "false and misleading statements" made to investors and the failure to reveal material information about the cost and timeline for the company's USD 8.5bn Pascua Lama project. At the beginning of June, Barrick officially announced that production at the project on the border of Chile and Argentina will not start in 2014 as expected. In addition, "the delay beyond 2014 is expected to result in a related increase in capital cost," the company said in a filing. Indeed, cost overruns already rose from an original $3 billion to more than $8 billion last year[1]. This case clearly illustrates the exponential growth of risks (weakened reputation, increasing capital costs and weakened legal security) mining companies are facing when failing to adequately manage environmental, social and governance (ESG) issues.

The purpose of this paper is to demonstrate the importance of incorporating ESG factors into existing business planning and risk management. The materiality of ESG risks in the mining sector illustrates the different types of risks companies are increasingly experiencing and how these risks might materially affect operations and financial prospects. Vigeo will also provide some recent examples of actual risk disclosure by companies that illustrate how some companies integrate CSR in their risk management and mitigation strategies.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE RISKS AND ITS FINANCIAL IMPLICATIONS

Mining activities can have severe consequences for employees, the environment and society at large. As a result, mining companies are closely scrutinized by a variety of stakeholders. According to Vigeo findings, the main ESG risks incurred by mining companies relate to bribery, biodiversity, climate change, community impact, health and safety, human rights, waste and water. All these risk factors can affect the company's operational efficiency, legal security, cohesion of human capital and last but not least its reputation. Based on Vigeo's findings of controversies in the mining and metal sector, it is indeed the company's **reputation** and its license to operate which are mostly affected. Indeed, companies must be able to react to changing community expectations. Mining companies must now deal with communities that are more connected, aware of their rights and have greater expectations for mineral investments. The number of social movements has increased in recent years and purely philanthropic initiatives no longer satisfy community demands as a more sustainable contribution to local social and economic development is expected.

According to Vigeo research, factors severely affecting a company's license to operate are its management of local pollution (noise and dust), the prevention of corruption, the respect of human rights – especially in regions with an increased risk of human rights violations – and how the company promotes social and economic development at surrounding communities. When analysing the number of controversies the mining sector is facing, there are only a few companies not involved in allegations. Most controversies are identified in the Community Involvement and Human Rights domain, often regarding the respect of property rights and resettlement, respect of indigenous people rights, use of security forces, the right to Free and Prior Consent, as well as negative impact on the health and environment of local communities.

Besides reputational risk factors, there are numerous ESG issues that can impact a company's **operational efficiency.** When land and water access is limited, disputes can arise that delay or even prevent projects from proceeding. In late 2011 for example, **Newmont** had to suspend construction activities at the Conga mine in Peru, which contains more than six million attributable ounces of gold and 1.6 billion attributable pounds of copper reserves, due to on going protests in the region about perceived impacts on local water supplies[2]. Also the recent events on **Barrick Gold's** Pascua Lima mine, illustrate the exponential increase of operational costs. Also climate impacts have a negative impact on a company's operational efficiency. Extreme weather events, floods, and increased exposure to diseases, can damage infrastructure and equipment, disrupt transportation routes, and affect employee health and safety. In the first half of 2011, **Rio Tinto's** operations in Australia were hit by cyclones, heavy rains, widespread flooding, and a related train derailment, leading to a five percent decline in iron ore shipments from its Pilbara operations, restricted production at its Argyle diamond mine, and a six-month shutdown of ERA's processing plant at the Ranger uranium mine. Overall, the weather extremes reduced Rio Tinto's earnings by an estimated $245 million[3]. As a price on carbon becomes more common, a carbon footprint will also become an increasing liability. A proactive management of minimising environmental impacts from energy use can be an opportunity to reduce operational costs, secure energy supply, triggering innovation and be prepared for (stronger) greenhouse gas legislation. In this regard, companies can set reduction targets and adopt Best Available Technologies to improve energy efficiency (such as heat pumps, cogeneration units or combined cycle power plants) or to produce renewable energies (geothermal energy, tidal energy, waste water heating).

Other ESG risk factors are the ones affecting the company's **cohesion of Human Capital.** Here, the 'Respect for freedom of association and the right to collective bargaining' as well as the 'Promotion of the labour relations' are important human capital drivers.

The Companies often have unionized employees operating under collective agreements. Having labour agreements and strong 'structured' relationships with unions in place can mitigate the material operational risk of a strike or work stoppage at a facility by virtue of increased trust and open channels of negotiation. Work stoppages and strikes/blockades/ sabotage can have material adverse effects on business results and the financial condition of a company. Given that mining operations are frequently in remote places, the logistical challenge of shutting down (even temporarily) and restarting operations act as 'threat multiplier', exacerbating the level of operational efficiency risk. **Freeport's PTFI** operations in Grasberg experienced such materialized risks towards the end of 2011 following a three month strike over pay conditions at the Grasberg Mine. During the strikes at Grasberg (Sept – Dec 2011), pipelines for transporting gold concentrate were sabotaged reducing the mines capacity to transport materials to ports for shipping and longstanding tensions led to attacks between workers and security forces, mine management as well as among the workers themselves. Subsequently Freeport was forced to declare 'force majeure' as it was unable to meet its production targets and eventually had to temporarily close down the Grasberg site due to increasing tensions. Freeport's estimated that the work 'interruptions' reduced its first quarter 2012 production by approximately 80 million pounds of copper and 125,000 ounces of Gold[4]. The impact of the terms agreed to in PT Freeport Indonesia's new labour agreement, including the bonuses and other strike-related employee costs, totalled approximately $66 million for 2011.

Besides such labour rights risks, skills shortages also become an acute Human Capital challenge in Australia and Canada, spreading to more places such as Indonesia, Mongolia, Brazil, Chile, Peru and Mozambique[5]. Indeed, increasing investments in the sector drives demand for skilled workers. Moreover, as more automated mining techniques become evident in the industry, additional safety challenges arise if employees are not properly and regularly trained, with the risk of causing more health and safety incidents[6]. Identifying, attracting and retaining critical operational and construction skills remain a top priority for the mining and metal sector. The risks associated with skills shortages include impact to production output, delay, downsizing, cancellation of projects, global mobility and increasing labour costs.

Finally, there are several factors impacting companies' **Legal Security** such as the 'Prevention of anti-competitive practices', 'Pollution prevention and control' as well as 'Waste management'. When not well managed, those risk factors can expose companies to increased litigation and to significant fines, remedial costs and compensation costs. For example, the Red Dog Mine, operated by **Teck Mining Corporation**, has had recurrent problems with wind-blown ore dust, and wastewater discharge issues, which have resulted in several fines between 2003 and 2010 and a USD60 million lawsuit brought by the downstream community of Kivalina[7] in 2003. An out-of-court settlement was reached in 2008 under which Teck would build a 55-mile pipeline, at the cost of tens of millions of dollars, to pump the wastewater into the Chukchi Sea instead. However, construction of this pipeline is still uncertain and not all the requisite permits have been obtained. A spill **at Norsk Hydro's** majority-owned Alunorte alumina refinery in Brazil in 2009 has resulted in a series of new claims in a local small-claims court. The spill, where water with red mud and bauxite residue overflowed the drainage channels around a deposit, occurred two years before Hydro acquired a majority stake in the world's largest alumina refinery. Exactly 5,343 lawsuits have been submitted before a small-claims court in Barcarena, in the state of Pará, Brazil.

The question however remains what companies can do to prevent such ESG risks having a negative material impact on their operations and improving their risk resilience? The other question is how companies are currently incorporating ESG risks into their strategic business planning and risk management?

RISK DISCLOSURE BY COMPANIES

Assessing the different ESG risks mining companies are increasingly facing, the average performance of European companies in the Mining and Metal sector was good for risk factors impacting their Reputation and Operational efficiency risk indexes with a score of 50/100, and only moderate averages were displayed for the Cohesion of Human Capital (40/100) and for Legal security (41/100). When looking at North America and Asia Pacific, companies' average scores are slightly less but confirm that Reputational and Operational Efficiency risk factors are the best addressed, although only moderate in absolute terms. As regards companies in Asia Pacific, Vigeo can only provide low assurances that companies are adequately managing its cohesion of Human Capital risks (26/100).

In addition, according to Vigeo's findings, 50% (25/50) of companies in the Mining & Metal sector, across those three regions, appear to cover CSR risks through their internal controls system. When comparing this to screenings approximately five years ago, only 35.8% (19/53) of the companies reported covering CSR risks through their internal controls system. Some of the emerging risks companies face today show up on their radar screens through well-recognised entry points; the challenge of carbon emissions and climate change is a good example.

GOOD PRACTICES

Considering the different levels of risk exposure for companies, there is no one size fits all on how companies can incorporate ESG risk into their risk management. However, following examples illustrate the range of tools that can be considered to better manage company's risk.

For example, **Anglo American's** internal controls system identifies a wide range of ESG risks, including community relations, business integrity, climate change, skills shortages and labour disputes. In addition, the company discloses mitigation strategies for each risk identified.

Another good tool can be found in **BHP Billiton's** Risk management system. BHP Billiton identifies risks material to their business and takes into consideration the potential health, safety, environmental, social, reputational, legal and financial impacts[8]. The severity of any particular risk is assessed according to a matrix that describes the degree of harm, injury or loss from the most severe impact associated with a specific risk. The objectives of the risk assessment process are to understand the nature and tolerance of the material risks for the Group and to ensure they are managed through the verification of critical controls. This system provides BHP with a comprehensive overview of all potential Health, Safety, Environment and Community (HSEC) events that may have a material adverse impact on their operations, including all sorts of safety related incidents, environmental incidents (such as tailing dam breaches etc), health risks including references to infectious diseases such as HIV/AIDS and malaria, as well as community protests or civil unrest. Risk Management Plans are established to assess, control and monitor material risks.

This example illustrates a range of tools on how (ESG) risks are integrated into the company's risk management, taking into consideration a number of **key principles as described here below**[9].

- **Governance over the (ESG) risk assessment process must be clearly established.** Oversight and accountability for the risk assessment process is critical to ensure that the necessary commitment and resources are secured. Consider, for example, the role of the board and audit committee in ensuring that ESG risks facing the organization are identified and adequately addressed.

- **Risk assessment begins and ends with specific objectives.** ESG risks are identified and measured in relation to an organization's objectives. Evaluating the risks relative to such objectives facilitates the reallocation of resources as necessary to manage these risks and best achieve stated objectives.

- **ESG Risk rating scales** are typically measured in terms of **impact and likelihood of occurrence.** Impact scales of risk should reflect different types of impact such as financial, people, and/or reputation.

- Once such risk profile is identified and a risk scale or matrix is developed, with on one axis the inherent likelihood and on the other the possible impact of such risk, **correlation and concentration of risks** becomes visible. (e.g., a concentration of certain risks that potentially creates a greater overall risk exposure -for example, reputational damage- than the sum of the individual risk exposures).

- Next is to determine **risk responses and mitigation strategies** by, for example, **scenario planning for the major risks** identified, and developing a number of operational responses. This can be a useful part of the planning cycle and can help to encourage innovative thinking.
- Important is to **effectively monitor and control processes** as they will provide the company with earlier warning and improved ability to respond.

- As a final step, management should **evaluate the adequacy** and effectiveness of the strategies and adjust their risk management on a regular basis. Risk management discipline then ensures that risk assessments become an **ongoing process**, in which objectives, risks, risk response measures, and controls are regularly re-evaluated.

CONCLUSIONS

The extraction industry is traditionally one of the most criticized by various stakeholders for its negative impacts on communities and the environment. Investors, being a key audience of corporate reporting, are increasingly looking to assess not just the financial performance of the companies in which they invest, but also the environmental, social and governance (ESG) performance. One reason for this is a conviction that companies that address ESG issues can achieve better long-term growth, cost savings, and profitability, while strengthening stakeholder relations and improving their brand and reputation.
Vigeo identified four different risk mitigation indexes impacting the companies' Operational Efficiency, Reputation, Cohesion of Human Capital and Legal Security. According to Vigeo findings across the three regions, the risk factors affecting the companies' Reputation and Operational efficiency were the best addressed in their reporting. However, for only 50% of the companies ESG risks appear to be covered by their internal controls system. Moreover, rather limited information is provided to assess financial materiality of ESG risks. While assessing ESG performance can provide investors with a good assurance of the company's capacity to manage their risks, the financial implications are not always clear. These are usually only revealed when controversies are reported or when a company is condemned and/or fined.
Therefore Vigeo identified some good practices among the risk disclosure of companies, such as risk matrixes that include the potential material impact of such risks, the likelihood of occurrence as well as corresponding risk mitigation strategies. Working through scenarios and impact studies can result in opportunities to tighten processes and controls, leading to dialogue and action plans that deliver value. While risk can never be eliminated, companies that move beyond traditional risk management to implement a more comprehensive approach to their control environment might be better placed to prevent, minimize, or recover from losses in shareholder value. This makes non-financial disclosure on how companies manage their ESG risks all the more critical, because it can help capture investor interest and establish the long-term value of ESG management. This way, as John Ruggie stated, Corporate Social Responsibility becomes risk management.

CONTACTS

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DISCLAIMER

Notes and Sources

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