

Equities

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ASX200 Mid-Tier & Junior Miners

Management of Developing Country Risk

- **Challenges for Companies; Implications for Shareholders** — ASX-listed mining companies are increasingly operating in developing countries, particularly southeast Asia and Africa. Challenges and risks can be associated with political and social instability, poor governance frameworks, and relationships with local communities that may be living in poverty. Issues vary with country, region and operation. Problems can lead to operational disruption, or even closure, due to regulatory intervention or physical dangers posed by a hostile community or other elements.
- **Companies Studied** — We investigated how 13 mid-size ASX200 companies that operate in developing countries are addressing these issues, and looked at their safety performance and sustainability performance more generally: **Aquarius Platinum, Discovery Metals, Gryphon Minerals, Intrepid Mines, Kingsgate Consolidated, Lynas Corporation, Medusa Mining, Mirabela Nickel, OceanaGold, Paladin Energy, PanAust, Perseus Mining and Resolute Mining**. Key elements of our assessment are summarised in Figure 1.
- **Two Positive Standouts** — **Kingsgate** and **PanAust** appear to have the most thorough approach to sustainability issues. **Oceana's** approach looks comprehensive but we are concerned that community issues may persist.
- **Safety** — **Kingsgate** (in Thailand) appears to have the best safety record of the established miners in this study. **Aquarius** has the most fatalities but has implemented improvement measures. **Medusa** has only recently reported safety data despite producing for some years – its historical safety track record appears “under-reported”.
- **Revenue Transparency** — International initiatives are underway to encourage transparency of payments to governments, aiming to ensure that natural resources benefit communities more widely. Increased community satisfaction and stability may create a more stable operating environment for companies. **Kingsgate, PanAust and Resolute** disclose these payments, and **Discovery, Gryphon and Perseus** indicated an intention to disclose.
- **Other Observations** — **PanAust** and **Paladin** appear to have the most detailed information on preventing bribery and corruption, but the “bar” was low in this area. **Oceana** and **Intrepid** have externally operated whistleblower facilities – an approach sometimes regarded as “best practice”. **Gryphon** and **PanAust** expressed alignment with the Voluntary Principles on Security and Human Rights. **Kingsgate** and **PanAust** are signatories to the gold miners’ International Cyanide Management Code. **Gryphon** and **Discovery** appear to have comprehensive processes in place to satisfy requirements of financial institutions, eg Equator Principles banks; World Bank/International Finance Corporation. Controversial issues among companies studied include community concerns over **Lynas’** radiological safety in Malaysia, and historical allegations against **Oceana** over interactions with the local community.

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Contents

Summary and Conclusions	4
Developing Country Risks for Miners	4
Challenges for Companies; Implications for Shareholders	4
ASX200 Companies in Our Study	4
Framework for Analysis	4
Key Findings – How the Companies Compare	6
No Overall Company Rating	6
Two Positive “Standouts”	6
Safety Observations	6
Revenue Transparency	6
Community Programs & Relationships	6
Bribery & Corruption; Security Forces; Cyanide	7
Financing Requirements Can Provide Rigour	7
Assessing Country Risk	7
Risks, Issues, Management and Mitigation	8
Community Programs and Potential Community Dissatisfaction	8
Revenue Distribution and Transparency	9
Bribery and Corruption	9
Human Rights Abuses by Security Forces	10
International Cyanide Management Code	10
Company Details	11
Aquarius Platinum (AQP.ASX)	12
Discovery Metals (DML.ASX)	14
Gryphon Minerals (GRY.ASX)	16
Intrepid Mines (IAU.ASX)	18
Kingsgate Consolidated (KCN.ASX)	20
Lynas Corporation (LYC.ASX)	22
Medusa Mining (MML.ASX)	24
Mirabela Nickel (MBN.ASX)	26
OceanaGold (OGC.ASX)	28
Paladin Energy (PDN.ASX)	30
PanAust (PNA.ASX)	32
Perseus Mining (PRU.ASX)	34
Resolute Mining (RSG.ASX)	36
Safety	39
Companies’ Safety Performance and Management	40
Country Risk	45
Country Risk Perspectives	46
Corruption Perceptions Index 2011	47
The Fraser Institute Policy Potential Index Rank 2011	48
Extractive Industries Transparency Initiative (EITI)	48
Previous Citi Reports	53
“ASX Companies: Bribery & Corruption Risk: Assessing the Approach of Potentially “At Risk” Companies”	54
“Human Rights & ESG Risks in Mining: Perspectives from Discussion with Oxfam”	55
“ESG Snippets: Aquarius Platinum: Safety Review Announcement”	56
Appendix A-1	57

Table of Figures

Figure 1. Key Parameters – Summary and Rankings by Company	5
Figure 2. Citi Assessment of Country Risk.....	7
Figure 3. Citi Assessment of Country Risk – World Map	8
Figure 4. Aquarius Platinum – Sustainability Issues and Approach	12
Figure 5. Discovery Metals – Sustainability Issues and Approach	14
Figure 6. Gryphon Minerals – Sustainability Issues and Approach	16
Figure 7. Intrepid Mines – Sustainability Issues and Approach.....	18
Figure 8. Kingsgate Consolidated – Sustainability Issues and Approach	20
Figure 9. Lynas Corporation – Sustainability Issues and Approach	22
Figure 10. Medusa Mining – Sustainability Issues and Approach.....	24
Figure 11. Mirabela Nickel – Sustainability Issues and Approach	26
Figure 12. OceanaGold – Sustainability Issues and Approach	28
Figure 13. Paladin Energy – Sustainability Issues and Approach.....	30
Figure 14. PanAust – Sustainability Issues and Approach.....	32
Figure 15. Perseus Mining – Sustainability Issues and Approach.....	34
Figure 16. Resolute Mining – Sustainability Issues and Approach.....	36
Figure 17. Lost Time Injury Frequency Rate per 1 Million Hours Worked (FY09-FY11)	41
Figure 18. Details of Individual Fatalities FY09 to Present (What Happened? Where? To Whom?)	42
Figure 19. Assessing “Country Risk” – CPI, PPI and US State Department	46
Figure 20. Citi Assessment of Country Risk.....	47
Figure 21. Corruption Perceptions Index 2011 – World Map	47
Figure 22. Country Risk Details (sourced from CPI, PPI, EITI and US State Department)	49

Summary and Conclusions

Developing Country Risks for Miners

Challenges for Companies; Implications for Shareholders

Increasing numbers of ASX-listed mining companies are now operating in developing countries, particularly southeast Asia and Africa. They may face various challenges and potential risks associated with issues such as political and social instability, poor governance frameworks, and dissatisfaction of local communities that may be living in poverty. This is in addition to the environmental and community issues mining companies more generally face. The nature and magnitude of risks, and the need and potential ability to mitigate them, will vary with country, region and operation.

These types of risks are very relevant to shareholders. They can lead to operational disruption, or even closure, due to regulatory intervention or physical dangers posed by a hostile community or other elements. Legal breaches (eg bribery and corruption) may lead to prosecution. A poor track record on environmental or community issues at one operation may discourage governments from awarding a company other opportunities. Conversely, a company with a proven good track record may more easily access new opportunities in the same or other countries.

ASX200 Companies in Our Study

In this report, we analyse how a selection of ASX-listed mining companies are addressing these issues.

Our study covers mining companies in the ASX200 that operate in developing countries, excluding the major miners. The larger companies are already better understood, and are less exposed to risks in any individual country.

Our sample covers 13 companies: **Aquarius Platinum, Discovery Metals, Gryphon Minerals, Intrepid Mines, Kingsgate Consolidated, Lynas Corporation, Medusa Mining, Mirabela Nickel, OceanaGold, Paladin Energy, PanAust, Perseus Mining and Resolute Mining.**

Figure 4 to Figure 16 set out the detailed information for each company. Our key findings are summarised in Figure 1.

Framework for Analysis

The map in Figure 3 shows our assessment of country risk relevant to companies in this study, based on information from various sources (see page 46). The lowest risk countries are Chile (**Kingsgate; PanAust**) and Botswana (**Discovery**). Among the highest risk are Indonesia (though Papua may be higher risk than Java, where **Intrepid** operates) and Zimbabwe (**Aquarius**).

We focus on how companies are approaching issues that can pose particular risks for developing country operations (eg managing community relationships, revenue transparency, bribery and corruption, and human rights risks around asset security). We also look at each company's safety performance (and transparency), and assess each company's approach to managing sustainability issues more broadly.

Most companies in our study (appropriately in our view) appear to place most focus on community relationships and programs, local environmental issues, and safety. Reduction of carbon emissions is generally further down companies' list of priorities – this is understandable given that carbon costs may not be imposed in these countries for some time.

Figure 1. Key Parameters – Summary and Rankings by Company

	Aquarius	Discovery	Gryphon	Intrepid	Kingsgate	Lynas	Medusa	Mirabela	Oceana	Paladin	PanAust	Perseus	Resolute
ASX Code	AQP	DML	GRY	IAU	KCN	LYC	MML	MBN	OGC	PDN	PNA	PRU	RSG
Key Commodities	Platinum	Copper-Silver	Gold	Copper-Gold	Gold	Rare earths	Gold	Nickel	Gold	Uranium	Copper-Gold	Gold	Gold
Key Developing Countries of Operations (* Citi Assessment of country risk: 1 to 4 - Low Risk to Very High Risk)	South Africa (*3) Zimbabwe (*4)	Botswana (*1)	Burkina Faso (*3) Mauritania (*4)	Indonesia (*4)	Thailand (*3)	Malaysia (*2)	Philippines (*4)	Brazil (*3)	Philippines (*4)	Namibia (*2) Malawi (*3)	Laos (*3) Chile (*1)	Ghana (*3) Ivory Coast (*4)	Tanzania (*3) Mali (*3)
Production Status (in Developing Countries)	Production	Development	Exploration	Exploration	Production	Development	Production	Production	Development	Production	Production	Production	Production
Market Cap (A\$m as at 5 Dec 2011)	1,331	592	466	657	989	2,305	1,107	784	667	1,445	2,007	1,418	946
Safety Management & Reporting (★ Limited Information; ★★ General Information; ★★★ Detailed Information)	★★★	★	N	N	★★★	★★	★★	★★	★★★	★★★	★★★	★★	★★
Safety Data (reported from FY09 to FY11)	✓	N	N	N	✓	✓	N	✓	✓	✓	✓	N	✓
Total Number of Employee / Contractor Fatalities (from FY09 to Present) (*Information received verbally from company; ND - Not Disclosed)	14	0*	0*	ND	0*	0*	1/ND^	0*	2	4	4	1	0*
Transparency of Payments to Governments (for producers) (★ Not Clearly Disclosed; ★★ Intends to Disclose; ★★★ Detailed Disclosure)	★	★★	★★	N	★★★	N	★	★	N	★	★★★	★★	★★★
Bribery Policy in Place and Public (★ Brief Mention; ★★ Generic Information; ★★★ More Detailed Information)	★	★★	★★	★★	★★	★★	★★	★	★★	★★★	★★★	N	★★
Whistleblower Policy (★ Internal Reporting; ★★ Anonymous; ★★★ Externally Managed)	★★	★★^	★	★★★	★	★	★	★	★★★	★	★★	N	★★
Sustainability Targets & Performance (★ Limited Target Information; ★★ Targets Described; ★★★ Targets and Performance Reported)	★	N	N	★	★★★	★★	N	N	★★★	★	★★★	★	★
General Comprehensiveness of Sustainability Reporting (★ Limited Information; ★★ General Information; ★★★ Comprehensive Information)	★★★	★★	★★	★	★★★	★★	★★	★★	★★★	★★	★★★	★★	★★
Use of Security Force / Alignment with UN Voluntary Principles on Security and Human Rights			✓								✓		
International Cyanide Management Code Signatory (Gold Producers)					✓						✓		
Controversies / Concerns highlighted by NGOs, Media or other						X			X	X		X	

Source: Citi Investment Research and Analysis

N = No information found; ^Medusa reported 1 fatality in Oct 2011 only, but did not disclose for previous years; ^^ National whistleblower scheme.

Key Findings – How the Companies Compare

A summary of the key findings of our research is shown in Figure 1. Figure 4 to Figure 16 give detailed information for each company, from which our conclusions were drawn. These figures also discuss companies' community programs. Safety (injury and fatalities) data is shown in Figure 17 and Figure 18. Country risk ratings are explained on page 46 and summarised in Figure 2.

No Overall Company Rating

We have not drawn our analysis together into a single “rating” for each company for various reasons. Companies face different levels of risk and therefore different approaches to mitigation are appropriate. Different levels of policy development and reporting are appropriate for established producers vs companies at exploration or feasibility study stage.

Two Positive “Standouts”

Kingsgate and **PanAust** appear to have the most comprehensive approach to managing sustainability issues. **Oceana's** approach looks comprehensive but, the company has the legacy issue of a Commission on Human Rights finding against it stemming from alleged issues some years ago – the company claims that nothing untoward occurred, but we are concerned that community issues may persist.

Safety Observations

Kingsgate (in its Thai operations) appears to have the best safety record of the established miners in this study (zero fatalities and zero lost time injuries over the FY09-FY11 period) – though it has had injuries in its Australian operations.

Aquarius has the highest number of fatalities but has implemented measures to improve safety, ranging from training to new technical procedures to avoid rockfall in underground mines. **Oceana**, **Paladin** and **PanAust** have had fatalities – these companies appear to have an active approach to safety management. **Perseus** had one recent fatality. **Medusa** has only recently started to report safety data despite being a producer for some years - as mentioned in Figure 10, we are aware of at least two earlier fatalities in addition to one in October 2011, so the company's historical safety track record is largely unknown. **Aquarius** and **Medusa** operate underground, where safety is more challenging. **Kingsgate** in Thailand is opencut.

Revenue Transparency

Companies in our study that explicitly disclose payments to government are **Kingsgate**, **PanAust** and **Resolute** – see company pages for details. **Discovery**, **Gryphon** and **Perseus** indicated an intention to disclose. **Medusa** operates in the Philippines, which has signaled its intent to become a signatory to the EITI (see page 48), perhaps catalyzing explicit disclosure at some stage. Explicit disclosure complements information gleaned from annual reports and other records.

Community Programs & Relationships

All companies in this study participate in community programs, typically around education, health, infrastructure including water, and sustainable local business development. Programs may be required under law or by financing institutions. They may be seen as benefiting the operation, as sensible risk management, or as consistent with a company's strategy and approach to doing business more generally. More controversial issues noted in our study include: **Lynas** – community

concerns over radiological safety in Malaysia; and **Oceana** – historical allegations pertaining to interactions with the local community and demolition of houses.

Bribery & Corruption; Security Forces; Cyanide

We judged **PanAust** and **Paladin** to have the most comprehensive information on preventing bribery and corruption, but the “bar” was not very high (see page 9). **Oceana** and **Intrepid** have externally operated whistleblower facilities – an approach sometimes regarded as “best practice”. **Gryphon** and **PanAust** expressed alignment with the Voluntary Principles on Security and Human Rights – an approach that appears most relevant in an environment where tensions can escalate or poor governance applies to the military or security forces (see page 10). **Kingsgate** and **PanAust** are signatories to the International Cyanide Management Code, which is relevant to gold miners (see page 10).

Financing Requirements Can Provide Rigour

Some companies have undergone relatively rigorous processes to satisfy requirements of financial institutions, eg Equator Principles (EP) banks; World Bank/International Finance Corporation (IFC). For example, **Gryphon** appears to have a relatively comprehensive approach to most areas we investigated in this study. The IFC conducted a rigorous due diligence process before becoming a Gryphon shareholder in 2009, and assists Gryphon with environmental and social issues. Similarly, **Discovery** appears to have comprehensive processes in place to meet requirements of EP banks and the IFC performance standards pertaining to Boseto banking syndicate requirements.

Assessing Country Risk

We have used a combination of sources to gain perspectives on “country risk”, as discussed on page 46. The sources used were Transparency International (which assesses corruption perception by country), the Fraser Institute (which assesses various countries’ policy attractiveness for mining) and the US State Department (country reports on human rights).

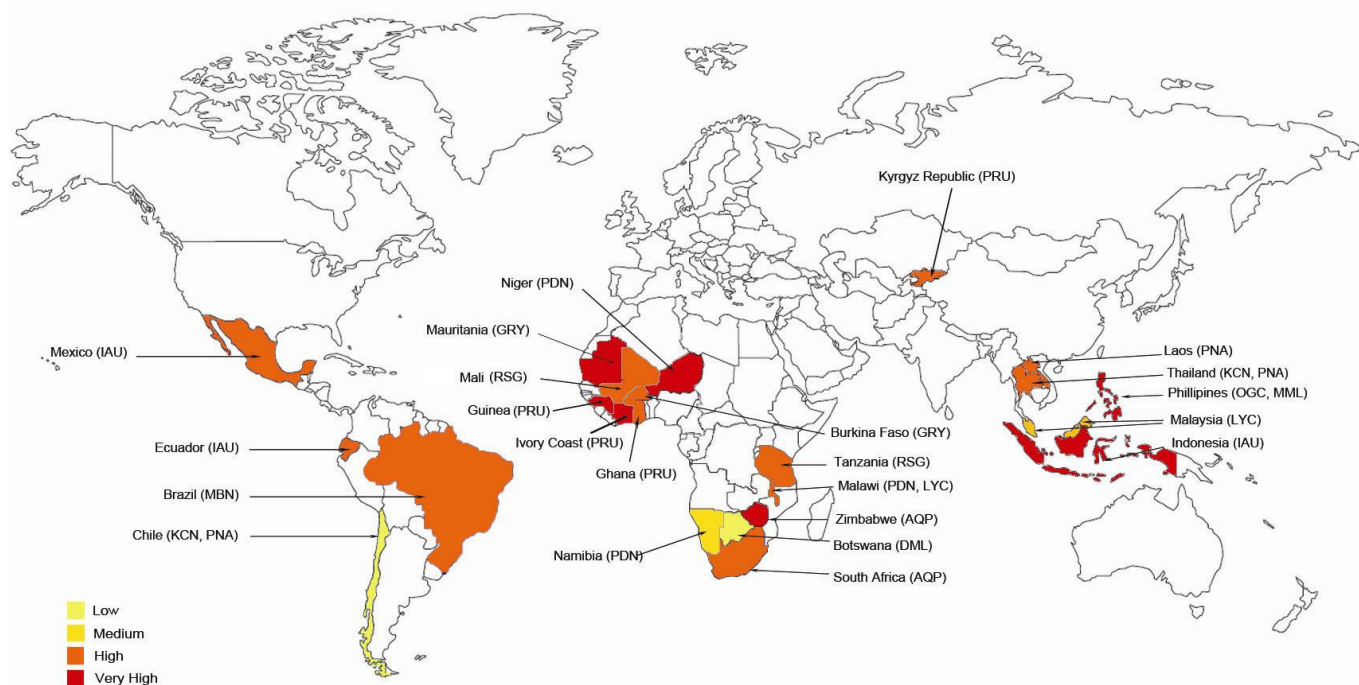
Our overall “risk ranking” for the countries pertinent to this study are shown on the map (Figure 3) and in Figure 2. Risks can vary between regions within a country.

Figure 2. Citi Assessment of Country Risk

Very High	High	Medium	Low
Guinea (PRU)	Brazil (MBN)	Malaysia (LYC)	Botswana (DML)
Indonesia (IAU)	Burkina Faso (GRY)	Namibia (PDN)	Chile (KCN, PNA)
Ivory Coast (PRU)	Ecuador (IAU)		
Mauritania (GRY)	Ghana (PRU)		
Philippines (OGC, MML)	Kyrgyz Republic (PRU)		
Zimbabwe (AQP)	Laos (PNA)		
	Malawi (PDN)		
	Mali (RSG)		
	Mexico (IAU)		
	Niger (PDN)		
	South Africa (AQP)		
	Tanzania (RSG)		
	Thailand (KCN, PNA)		

Source: Transparency International, Fraser Institute, US State Department, Citi Investment Research and Analysis

Figure 3. Citi Assessment of Country Risk – World Map



Source: Citi Investment Research and Analysis

Risks, Issues, Management and Mitigation

The types and magnitude of risks will vary between countries, and also to an extent between regions within countries. Risks that companies in our study may be exposed to include those discussed below. These potential risks provide a framework for our company analysis.

This is in addition to environmental management which is touched on in the company pages, and safety which is addressed on page 40 and Figure 17 and Figure 18.

Community Programs and Potential Community Dissatisfaction

Communities surrounding mining operations in some developing countries live in poverty. Operations can affect the livelihood of local communities, for example due to relocation of villages, disruption to local agriculture or potential impact on water supplies. Mining companies are often required, under local law or under requirements of lending banks (eg Equator Principles banks; World Bank/ International Finance Corporation), to contribute to community programs in countries and localities where they operate. For some companies, establishing and maintaining a reputation as a good company to have in one's country is a core element of strategy.

Initiatives typically involve mitigating project impacts as well as supporting projects associated with poverty alleviation (eg health, education, infrastructure including water supply, and assistance establishing sustainable local business ventures). Employment opportunities and revenues from operations may also benefit communities near the operation and the country more broadly – as long as poor governance and corruption do not prevent the benefits flowing to the broader population.

Companies are also likely to benefit if they can contribute to a stable and harmonious local environment, and assist in improving the education and health of local communities from which they may recruit workers.

In our company pages we discuss community initiatives that companies are undertaking. It is difficult to assess adequacy of these initiatives from published material, as the needs of different communities, and therefore appropriate programs, will vary. Community programs may be less important in “richer” countries with better governance, and greater where local communities live in poverty.

We have not formally assessed company approaches against benchmarks such as International Finance Corporation (IFC) Performance Standards or OECD Guidelines. Neither have we attempted to assess company’s community grievance processes against frameworks such as those relating to the UN Guiding Principles on Business and Human Rights. We think this is beyond the scope of a desk based study. Site visits, interactions with stakeholders and specific expertise in the area would appear necessary to assess what is appropriately required against what is provided at each operation.

Revenue Distribution and Transparency

Dissatisfaction can arise when local communities or a country’s population do not benefit from resource projects to the extent that they expect. Tensions can result when communities near an operation appear to benefit disproportionately compared to the wider population. These issues can lead to social instability and project disruption.

Resource rich countries with a high level of bribery and corruption can have a dissatisfied population mired in poverty, while the benefits go to a small “elite”. One approach that aims to tackle this issue is revenue transparency, whereby companies publicly disclose revenues (eg taxes and royalties) paid to governments. Under the Extractives Industry Transparency Initiative, signatory companies disclose payments to governments and EITI-compliant governments disclose receipts (see page 48). Major miners including BHP Billiton and Rio Tinto are EITI signatories. Another initiative is disclosure requirements by stock exchanges in the US and Europe.

While many aspects of revenue and benefits distribution are outside companies’ control, resulting dissatisfaction and instability can pose a material risk to companies and their shareholders. Therefore a number of companies and investors are supporting transparency initiatives.

Bribery and Corruption

Many countries in our study rank poorly when it comes to prevalence of bribery and corruption (see page 47). Meanwhile, regulation in developed countries is strengthening, along with incidences of prosecution. Companies can be prosecuted in countries including Australia, the UK and US for bribery offences committed in other countries. In particular, companies that come under the new UK Bribery Act (effective July 2011) face a tougher jurisdiction. This Act explicitly covers facilitation payments. A defence under the Act is for a company to demonstrate that it had adequate procedures in place to prevent bribery.

In our company pages, we summarise whether companies have explicit publicly available policies on preventing bribery and corruption. We feel that it is hard for a company and all of its employees to take a convincing stance on the issue without a clear document in the public domain as a starting point. We also note whether the company has a whistle-blowing policy in place – the most rigorous and convincing approach appears to include the option of an externally managed whistle-blowing facility that people can use anonymously, since this must make it easier for employees (and others) to raise issues without fear of retribution.

In Figure 1 we rank each company's bribery and corruption policies as follows:

- ★ ★ ★ Companies that provide some anecdotal detail on implementation or monitoring. In this study we awarded 3-stars to two companies, **PanAust** and **Paladin**, but it is arguable whether any companies in this study merited 3-stars on the basis of published information.
- ★ ★ Companies that provide some generic information on policy, facilitation payments, whistleblower facility and/or training.
- ★ Companies that provide only a general mention of bribery and corruption in the company's overall code of conduct or code of ethics, or appear to cover it under "ethics", but provide no other information.

Human Rights Abuses by Security Forces

Some resources projects in developing countries have faced allegations of association with human rights abuses by security forces or military personnel. Well documented allegations involve the Freeport operation in Papua, Indonesia, and Anvil Mining in the Democratic Republic of Congo. Some companies, including major miners like BHP and RIO, have signed up to the Voluntary Principles on Security and Human Rights. These Principles guide companies in maintaining the safety and security of their operations while ensuring respect for human rights and fundamental freedoms. However, Freeport is also a VPSHR signatory but problems in Papua persist, suggesting that solutions can be challenging.

Risks may be exacerbated by factors such as political instability or tensions in a country or region, customary military behaviours, and general poor rule of law. Conversely, several companies in our study reported that security is a "low level" issue that revolves mainly around keeping out intruders to prevent theft and for safety reasons. The appropriate risk management strategy for a company depends on the level of risk.

International Cyanide Management Code

The ICMC is a voluntary initiative for the gold mining industry. It covers all stages of the process including cyanide production, transportation, handling and storage, and mining operations, and focuses on managing safety and environmental risks. Signatories commit to broad principles for managing cyanide in a responsible manner. Operations are certified as being compliant with the code based on third party audits, which are conducted every three years. Signatories include cyanide producers and transporters, as well as gold mining companies.

Company Details

Figure 4. Aquarius Platinum – Sustainability Issues and Approach

Aquarius Platinum (AQP.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	1,331
Index	ASX100
Year End	30-Jun
Operations	<p>SOUTH AFRICA, ZIMBABWE</p> <p>Platinum miner in South Africa - Kroondal (50% JV with Anglo Platinum), Marikana (50% JV with Anglo Platinum), Everest (100%) and Blue Ridge (50% JV with Imbani Platinum) and in Zimbabwe - the Mimosa mine (50% JV with Impala Platinum).</p>
Status	Producer - Kroondal (primary operation), Marikana, Everest & Mimosa mines
Key ESG info reported	<p>Comprehensive reporting of sustainability metrics, and discussion around issues:</p> <ul style="list-style-type: none"> - Health and safety (FY11 data - LTIFR 2.5 / 1m hours worked, 8 fatalities); - GHG emissions (891,485 tCo2e in FY11); - Environmental incidents (3 medium-low risk incidents in FY11, 2 involving overflows from stormwater control dams, and the third one a higher than expected micro-bacteriological count identified in water, all managed and reported accordingly); - Workforce statistics (inc. gender); - Community investment. - Waste; - Water and energy consumed; - Land management and rehabilitation; - Employee training. <p>Targets and performance reported for employment equity (including highly disadvantaged South Africans and women employees).</p>
Safety	<p>Safety performance has been a major challenge for AQP - a company with one of the highest numbers of fatalities among ASX100 companies. Three fatalities occurred at the newly acquired Blue Ridge mine in FY10. AQP undertook re-training during a two week closure and revised the mine plan. A catastrophic fall of ground occurred at Marikana in July 2010, resulting in five fatalities. Since then, AQP has implemented new measures to prevent fall of ground at its underground operations. An independent audit (instigated by Citi and Solaris) was conducted to assess the new practices in the light of "world best practice".</p> <p>The consultant concluded that AQP's new ground control program meets and in areas exceeds industry standards (North America / Australia / World) and will reduce the future incidence of catastrophic falls of ground, to arrive at a safe and cost effective mining operation achieving "zero harm". AQP indicated that these measures would increase cash costs slightly, and is championing changes to South African standards on fault detection and hangingwall support. The FY11 Annual Report also discussed in some detail the safety training and other initiatives at its different operations.</p>
Company Risks / Issues	
Government Issues	<ul style="list-style-type: none"> - AQP reports that the operating environment in South Africa is subject to factors such as activism among labour union factions, electricity price increases due to historical under-investment in generating capacity by the State, limited availability of electricity and water for mining operations (in particular new projects) and high cost inflation. The South African govt. has levied additional taxes and royalties on mining companies and future increases are possible. - AQP also reports that the Zimbabwean govt has levied additional taxes/royalties on mining companies and these could increase again in future. Zimbabwe's Indigenisation law calls for all companies valued > \$500,000 to be 51% owned by black Zimbabweans by 2015. AQP has stated that regulations in this regard were published in FY11, and while negotiations continue with the Zimbabwean government, there can be no guarantee that it will not be implemented as currently drafted. AQP confirmed Mimosa had submitted its Indigenisation Plan on 9 May 2011, in line with requirements. This initial proposal was rejected and a further proposal was requested. Work continues on a revised plan and Mimosa management remains in discussions with authorities to ensure a satisfactory conclusion within required timeframes.

Figure 4. Aquarius Platinum – Sustainability Issues and Approach

Issues/ Sustainability Focus Areas highlighted by Company	<p>- On 25 November 2011, the media reported that the Finance Minister of Zimbabwe had proposed, in a budget speech, a plan to increase the royalty charged on platinum from 5% to 10%.</p> <p>Issues clearly highlighted by the company including:</p> <ul style="list-style-type: none"> - Employment and indirect job creation; - Health and Safety (Five major safety risks: rockfalls, conveyor belts, trackless machinery, fires and explosives); - Training and development; - Employment equity programmes (inc. disadvantaged locals and women); - Making land available for incorporation into local municipality; - Social investment and local economic development; - Environment (inc. water management, energy consumption, reducing carbon emissions and dust emissions).
Security Risk / Use of Security Force	Nothing Found
Community Programs, Initiatives & Benefit Sharing	<p>In South Africa, AQP has dedicated community relations officers at each mine. They engage with local communities to understand their needs and work with communities and government departments to find solutions. The three broad priority areas of investment are:</p> <p>Education infrastructure (schools, classrooms and operational costs); Social infrastructure (bulk water, sanitation, town planning, formalisation of informal settlements); and Small, medium and micro enterprise (SMME) development supplying the mines. Each operation allocates 0.5% of pre-tax profit to fund these projects. R7.5m was spent by AQP on local economic development initiatives and corporate social investments in South Africa in FY11.</p> <p>In Zimbabwe, the Mimosa mine's community investment priorities include school construction and refurbishment, school supplies and scholarships, water reticulation and borehole drilling in communities. In FY11, Mimosa spent \$2.4m on corporate social investment projects, including local access to water and related water infrastructure.</p>
Community Dialogue & Grievance Procedures	<p>At each operation, interaction with local communities is through quarterly community liaison meetings with various community representatives including traditional chiefs, councillors, school heads and the local rural district council. Issues of mutual concern are raised and addressed.</p> <p>AQP also maintains a complaints register to record all legitimate complaints raised by members of the community. All the issues recorded are then discussed and addressed in the quarterly community liaison meetings. To date, in 2011, the most serious complaints involved excessive noise as a result of blasting during the construction of the K6 shaft at Kroondal. Steps were taken to reduce noise and solve the concerns.</p>
Revenue Transparency	Payments to Governments by country not explicitly disclosed.
Bribery & Corruption Policies	<p>No clear statement on bribery and corruption found.</p> <p>Employees are encouraged to alert management or raise a concern through the Ethics Hotline if they have suspicions of wrongdoing or potential misconduct.</p>
Company Reported Issues Highlighted by Stakeholders	- AQP discloses sustainability issues raised by stakeholders for each of the company's operations. These generally include safety, operating and human resources issues (including use of contractors) and regulatory compliance (inc. social and environmental aspects related to mining licences).
Issues / Concerns highlighted by NGOs, Media or other	Nothing Found

Source: Company Data, Citi Investment Research and Analysis

Figure 5. Discovery Metals – Sustainability Issues and Approach

Discovery Metals (DML.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	592
Index	ASX200
Year End	30-Jun
Operations	BOTSWANA Projects in Botswana - Boseto copper-silver project (100%), Dikoloti nickel project (40% joint exploration agreement with JOGMEC), and manganese (16 prospecting licenses granted)
Status	Discovery is focusing activities on the Boseto copper project (open cut first, underground later). Construction commenced December 2010, first production expected in 1H 2012.
Key ESG info reported	No ESG metrics reported. The 2011 Annual Report indicated that DML intends to report next year, with commencement of production, and is considering frameworks such as the GRI. In discussions, DML reported that it has had only 1 LTI (lost time injury) on site and has had no fatalities. No sustainability targets found.
Company Risks / Issues	
Government Issues	DML describes Botswana as a stable, transparent and mining friendly democracy with a single A credit rated economy and an attractive profit based tax system. [Botswana is the second highest / best ranking country in this study on Transparency International's Corruption Perception Index, after Chile.] In discussion, the company commented that Botswana's diamond production is expected to decline over the next decade, and both the government and community are positive about the benefits of this new mining project.
Issues/ Sustainability Focus Areas highlighted by Company	DML comments that best practice environmental standards have been adopted in accordance with the Equator Principles and IFC Performance Standards, and that its systems and practices are subject to ongoing review on behalf of the Boseto banking syndicate. At present everything is "on track" and will be in place as required in 2012. Health and safety highlighted as areas of focus for the company. The Board has adopted a Risk Management Policy to review, among other issues, major non-financial regulatory matters including: - Environment; - Safety & health; - Asset protection; - Discrimination and harassment; - Conflicts of interest and ethical standards.
Security Risk / Use of Security Force	From discussion with the company, we understand that security issues are not significant, given the operation's relatively remote location, and the relative wealth and stability of Botswana.
Community Programs, Initiatives & Benefit Sharing	Since the outset of exploration activities, Discovery has maintained regular consultation and engagement with communities in the vicinity of the mine, the regional community and government in Maun (Botswana) and the relevant government departments in the nation's capital of Gaborone. Project approval under Botswana law required a comprehensive community consultation process. The Company has now commenced engagement with the local communities and leaders to design community programmes for the operations phase of the Boseto operations. The first project to be implemented is the upgrade of the Semolo Pan Spiral Reverse Osmosis plant (60 km from Boseto) which supplies potable water to six communities in the district.

Figure 5. Discovery Metals – Sustainability Issues and Approach

Community Dialogue & Grievance Procedures	Community consultation and communication appears to be an active process. Significant escalation of grievances appears low risk.
Revenue Transparency	DML indicates an intention to be actively transparent about payments to government and communities, but it is not yet clear to us exactly what format this will take.
Bribery & Corruption Policies	<p>According to DML's Code of Conduct, the Company, (its Directors, senior executives, employees, officers, contractors, sub contractors, agents and third parties employed or appointed by the Company to represent its interests), will not make or accept bribes, pay-offs, kick-backs or anything of value in business dealings.</p> <p>There is a national whistleblower policy in Botswana, but not a company one as yet.</p>
Company Reported Issues Highlighted by Stakeholders	N/A
Issues / Concerns highlighted by NGOs, Media or other	Nothing Found

Source: Company Data, Citi Investment Research and Analysis

Figure 6. Gryphon Minerals – Sustainability Issues and Approach

Gryphon Minerals (GRY.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	466
Index	ASX200
Year End	30-Jun
Operations	BURKINA FASO, MAURITANIA 100% owned projects in Burkina Faso (Banfora Gold project) and Mauritania (Tijirit Gold Project, Akjoujt Copper-Gold Project and Saboussiri Copper-Gold projects). Mauritania assets acquired September 2010.
Status	Banfora (GRY's main project) is at the feasibility study stage. If the development decision is approved, production could commence in 2014. Mauritanian assets at exploration stage.
Key ESG info reported	No ESG metrics reporting (not a producer). No sustainability targets found.
Company Risks / Issues	
Government Issues	GRY describes Burkina Faso as pro-mining, with grid-power and water.
Issues/ Sustainability Focus Areas highlighted by Company	The International Finance Corporation (IFC, a member of the World Bank Group) made an equity investment in GRY in 2009 to assist the company's operations in Burkina Faso, as part of IFC's commitment to development in Africa. The IFC conducted due diligence on Banfora and concluded that the limited number of specific potential environmental and social impacts could be avoided or mitigated - impacts on water, agriculture and livelihoods were considered. The IFC remains a shareholder and assists on environmental and social studies - GRY reports that it has adopted IFC best practices. Issues clearly highlighted by the company include: <ul style="list-style-type: none">- Management of exploration activities (inc. safe disposal of oils, waste materials and hazardous materials handling);- Infrastructure and associated facilities (inc. public safety, dust controls and hazard management);- EH&S (inc. surface and groundwater protection and drainage);- Community engagement (inc. managing community expectations and development planning).
Security Risk / Use of Security Force	GRY's Environmental and Social Action Plan (of 2009) for the Banfora project described design and conduct training for Management and Gryphon Security personnel to ensure that the principles and procedures for compliance with the Voluntary Principles on Security and Human Rights are in place and understood.
Community Programs, Initiatives & Benefit Sharing	The IFC has helped to define GRY's Community Investment Strategy in West Africa. Gryphon has adopted a Strategic Community Approach to underpin its future community investments. The five key elements of this approach are: Strategic (well thought out and defined in advance); Aligned (with business as well as community interests and priorities); Multi-stakeholder driven (community, local government as well as business involvement); Sustainable (encouraging self-reliance rather than dependency through to mine closure); Measurable (assessing outcomes and impact but also return on investment). GRY has participated in a number of community based projects in Burkina Faso including Niankorodougou village library, Nogbele village waterbore and women's group market garden. Community projects "in the pipeline" include road upgrades, reforestation, upgrading small dams for livestock watering in the dry season and equipment for vocational training.
Community Dialogue & Grievance Procedures	In 2009 GRY reported that consultation with local communities in Burkina Faso was being undertaken to be formalised into a Stakeholder Engagement Plan (SEP). The SEP would also include a formal grievance mechanism for local communities that will be disclosed publicly. (No updates found)

Figure 6. Gryphon Minerals – Sustainability Issues and Approach

Revenue Transparency	<p>In 2009, GRY's partner, IFC (a member of the World Bank), conducted an assessment of the governance risks to development impacts in Burkina Faso. IFC's comments were:</p> <p>"The World Bank Mining Policy Division is engaged with the Govt. of Burkina Faso with respect to mining sector policy reforms and capacity building, and Extractive Industry Transparency Initiative ("EITI") implementation. The Government has shown a strong commitment to developing an internationally competitive mining sector enhanced by good governance and transparency. Burkina Faso is generally seen, based on available indicators such as Transparency International's Corruption Perception Index and the World Bank Institute's Governance Indicators, as taking the necessary steps to increase its governance and transparency capacity. The Company ... has committed to making public disclosure of all revenue payments to the government once commercial production begins. On balance, given the governance context, the current engagement of the World Bank, and the expected development impacts, IFC believes this is a project which it should support."</p>
Bribery & Corruption Policies	<p>Current Code of Conduct states that employees must not submit or accept any bribe, or other improper inducement. Any such inducements are to be reported to managers. Employees are encouraged to raise any matters of concern in good faith with the head of their business unit or with the Company Secretary, without fear of retribution.</p>
Company Reported Issues Highlighted by Stakeholders	<p>Key concerns identified by local communities in Burkina Faso include water, education, infrastructure, women's issues, health and employment.</p>
Issues / Concerns highlighted by NGOs, Media or other	<p>Nothing Found</p>

Source: Company Data, Citi Investment Research and Analysis

Figure 7. Intrepid Mines – Sustainability Issues and Approach

Intrepid Mines (IAU.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	657
Index	ASX200
Year End	31-Dec
Operations	<p>INDONESIA (also ECUADOR, MEXICO)</p> <p>Tujuh Bukit gold-silver-copper project in Indonesia (80% economic interest JV with Indonesian company PT IMN).</p> <p>Exploration sites in Ecuador (Shyri copper-gold project 100% owned) and Mexico (Taviche silver-gold project - ~40% IAU / 60% Aura Silver Resources - from Canada).</p>
Status	<p>Main project (Tujuh Bukit) at early stage, exploration/delineation drilling underway. CIRA estimates potential production from 2017/18 onwards.</p> <p>IAU describes the project as "perhaps the largest known, independently held, undeveloped copper-gold project in the world".</p>
Key ESG info reported	<p>No ESG metrics reported.</p> <p>Workforce target of at least 70% of workers to come from the local community.</p>
Company Risks / Issues	
Government Issues	IAU's main focus, the Tumpangpitu project (part of Tujuh Bukit) in Java, is situated within protection forest, a category of forest land where Indonesian law restricts activities and prohibits open-pit mining. Intrepid is working with relevant Indonesian authorities to allow for a review of the status of this area of forest. We understand that the restriction is to protect the hill slope against erosion, rather than for biodiversity or other environmental concerns. Other such projects in Indonesia have achieved rezoning, but the process may be long drawnout. Another IAU Indonesian project (Katak Prospect) is situated within production forest, a forestry category with fewer development restrictions.
Issues/ Sustainability Focus Areas highlighted by Company	<p>Sustainability areas of focus mentioned include:</p> <ul style="list-style-type: none"> - Communities (inc. employment, distribution of project benefits, honest dealings and interaction); - Minimise environmental impact and compliance with environmental policies and regulations; - Health and safety (inc. social and mental wellbeing of employees).
Security Risk / Use of Security Force	Nothing Found
Community Programs, Initiatives & Benefit Sharing	<p>Community programs have been defined through the Company's participation with host communities and local government. These programs, which commenced in 2010, cover three main areas: community relations, community development and government relations.</p> <p>The primary community program focus during 2011 includes:</p> <p>Identification of priorities, setting up communications programs; addressing key issues (e.g. employment, provision of information, distribution of project benefits); Regular updates and site visits for key community members, local government, local media and NGO's; Community development construction programs prioritising health (local clinic), education (schools) and public infrastructure (irrigation, road maintenance); Development of local businesses, training and income generation initiatives for youth groups, and other community members; Mitigation of effects of illegal mining in cooperation with local government and forestry offices; Development and training programs for local contractors, suppliers, farmers, fishermen and vendors; and endeavouring to ensure that at least 70% of the workforce comes from the local community.</p>
Community Dialogue & Grievance Procedures	The 2011 focus includes completion of perception surveys and addressing identified community concerns and issues such as distribution of project benefits in Indonesia.
Revenue Transparency	Nothing Found (potential production several years away)
Bribery & Corruption Policies	Code of Conduct prohibits giving or taking bribes, kickbacks, gratuities or other benefits not legitimately due or any other illegal payments for favourable treatment or as an inducement for doing business.

Figure 7. Intrepid Mines – Sustainability Issues and Approach

Managers are expected to ensure the code is communicated to and understood by all people reporting to him.

IAU's Whistleblower Policy provides employees, directors or contractors with the means to report to an independent organisation (Global Corporate Compliance Inc), conduct which they reasonably believe to be corrupt or illegal, with the choice to do so anonymously. If the allegation is made in good faith, the employee will be protected from any form of victimisation or action by the company.

Company Reported Issues Highlighted by Stakeholders	N/A
Issues / Concerns highlighted by NGOs, Media or other	Nothing Found

Source: Company Data, Citi Investment Research and Analysis

Figure 8. Kingsgate Consolidated – Sustainability Issues and Approach

Kingsgate Consolidated (KCN.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	989
Index	ASX200
Year End	30-Jun
Operations	<p>THAILAND, CHILE</p> <p>Chatree gold mine in Thailand (via 49% owned Akara Mining [Kingsgate owns 100% of ordinary shares and receives 100% of cashflow/ordinary dividends] - Thai shareholders hold 51% via preference shares).</p> <p>In Feb 2011, acquired the producing Challenger Gold mine in Australia (100%) and acquired Arqueros silver-gold advanced exploration project in Chile through a 70% stake in ASX-listed Laguna Resources.</p>
Status	<p>Current annual production of c120-140koz from Chatree and 100koz from Challenger.</p> <p>Arqueros at feasibility study stage, for potential production in 2013.</p>
Key ESG info reported	<p>Comprehensive reporting of sustainability metrics, including:</p> <ul style="list-style-type: none"> - Safety (FY11 data - Chatree: LTIFR 0.0 / 1m hours worked, TRIFR 0.0 / 1m hours worked; Challenger: LTIFR 12.0 / 1m hours worked); - GHG emissions (70,678 tCo2e in FY11); - Environmental incidents (No reportable incidents occurred in Chatree in FY11 but 14 low severity incidents were recorded, including oil spills < 10 litres); - Water and energy consumed; - Land rehabilitation; - Workforce statistics (inc. gender); - Employee training; - Community expenditure; - Supply chain sourcing (90% of all goods are sourced within Thailand in FY11, an increase of 5% on last year's result, while 96% of warehouse stock comes from within the country). <p>Comprehensive table with sustainability targets and performance reported, including workforce, community, environment and supply chain for Chatree.</p>
Company Risks / Issues	
Government Issues	- Kingsgate cites that Chatree has not lost one day of production during six changes of Government and a military coup in Thailand.
Issues/ Sustainability Focus Areas highlighted by Company	<p>Issues clearly highlighted by the company include:</p> <ul style="list-style-type: none"> - Environmental impact (inc. cyanide management - KCN is a signatory to the International Cyanide Management Code); - Efficient water use and maintaining good water quality; - Control of dust and noise from operations; - Safe workplace and investing in people; - Local investment and capacity building.; - Continued local and national economic growth. <p>KCN cites that Chatree is the world's safest gold mine with no lost time injuries recorded during the past 8 years. The company also cites that the Chatree mine was the first, and for several years, the only mine in the world to be certified under the SA 8000:2008 standard for social accountability. SA 8000 is based on the UN Universal Declaration of Human Rights Convention on the Rights of the Child and various International Labour Organisation (ILO) conventions.</p>

Figure 8. Kingsgate Consolidated – Sustainability Issues and Approach

Security Risk / Use of Security Force	In discussion, KCN observed that security is a low profile issue at Chatree, with the operation not requiring significant security.
Community Programs, Initiatives & Benefit Sharing	<p>Community contributions are aimed mainly at education, health and water supply - the approach has been to follow the United Nations Millennium Project goals. Direct contributions (A\$853,000) were made in 2010 to local student scholarships, local conference facilities, health care emergency van, water supplies and home reconstruction after the ravages of summer storms. (FY11 community contribution was \$704,642).</p> <p>In 2010, a new Community Involvement Plan was initiated using the Thai Population Development Association (PDA). The aim is to further develop the quality of life of villagers around Chatree, by engaging directly with the stakeholders including villagers, local village heads, local government and Chatree employees. In FY11, assistance with drinking water to ten drought-affected villages continued, and business development assistance was provided to the local Thepnimit drinking water factory.</p>
Community Dialogue & Grievance Procedures	<p>Chatree Community Involvement Plan launched in 2010. Local community and local government meetings have ensured dialogue is maintained between the Company and Chatree area community. Concerns centre around land purchases, employment, dust, water and noise, with five formal complaints lodged.</p> <p>KCN states that complaints have been received regarding the possibility that local water quality is affected by cyanide contamination. Analysis by independent authorities, including government ones, demonstrated that no contamination has occurred. Detailed education sessions about Chatree's processing method and cyanide destruction procedures were held.</p>
Revenue Transparency	<p>Kingsgate reports that it is a signatory to the Extractive Industries Transparency Initiative, though it does not appear to be listed on the EITI website.</p> <p>Royalties totalling A\$8.9m in FY11 were paid to Thai authorities - these go to the provincial government and the local village councils (60%) and the central government (40%).</p>
Bribery & Corruption Policies	<p>Code of Conduct states that participation, whether directly or indirectly, in any bribe, kickback, contribution or similar payment is prohibited.</p> <p>The company is also opposed to the making of "facilitating payments" to public officials, and every effort should be made to resist or minimise them. Such payments may only be made under strict conditions after obtaining management approval.</p> <p>The code applies to all Directors, senior executives and employees, full-time, part-time and contract. Managers are expected to ensure that the code is communicated to and understood by employees reporting to them. All breaches of the code must be reported to direct managers. No retaliatory action will be taken or permitted against an employee making good faith reports of a suspected breach of the Code.</p>
Company Reported Issues Highlighted by Stakeholders	<p>Major material issues identified by stakeholders include:</p> <ul style="list-style-type: none"> - Water quality and water efficiency; - Cyanide management (inc. tailings); - Safe workplace and investing in people; - Local investment and capacity building;
Issues / Concerns highlighted by NGOs, Media or other	Nothing Found

Source: Company Data, Citi Investment Research and Analysis

Figure 9. Lynas Corporation – Sustainability Issues and Approach

Lynas Corporation (LYC.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	2,305
Index	ASX100
Year End	30-Jun
Operations	MALAYSIA (also MALAWI) Rare earths deposit in Australia, processing plant in Malaysia (Lynas Advanced Materials Plant - LAMP). (Also rare earths asset in Malawi).
Status	LAMP construction: 85% complete (as at 16 Nov 2011). Construction completion expected early 2012. Malawi asset at early evaluation stage.
Key ESG info reported	A few ESG metrics reported. - Safety (zero lost time injuries recorded in FY11); In September 2011, the LAMP project, in Malaysia, achieved 5 million hours worked lost time injury free. - Environmental incidents (zero in FY11). LYC cites setting and monitoring of sustainability targets in a number of areas including the environment, water, GHG emissions, community, workforce and safety. (No detail provided)
Company Risks / Issues	
Government Issues	Nothing Found
Issues/ Sustainability Focus Areas highlighted by Company	<p>The key issue is around radiological safety, which has led to a project delay. The International Atomic Energy Agency (IAEA) review commissioned by the Malaysian government did not find any non-compliance with international safety standards. The review identified 10 areas of improvement to be addressed before the next licensing phase of the project, which Chairman/CEO Nick Curtis said he accepted and would address. LYC is implementing the recommendations of the review. LYC has submitted to the Malaysian Atomic Energy Licensing Board its plans to address long term waste management including plant closure, and an updated Radiation Impact Assessment.</p> <p>Other sustainability focus areas mentioned include:</p> <ul style="list-style-type: none"> - Compliance to environment and community standards; - Number of environment and community related incidents; - GHG emissions; - Water consumption; - Reuse of synthetic mineral products; - Local employment; - Employee volunteering; - Health and safety (% of employees involved in safety and health activities, incident reporting ratios and injury frequency rates). <p>Crisis response plans to minimise the adverse consequences of any incident to LYC's people, neighbours, the environment and community were developed and rolled out across the business. Crisis simulations and exercises were conducted to ensure an effective response capability exists at a corporate and site level.</p> <p>An internal standard, based on international standards for Process Hazard Analysis, was developed.</p>
Security Risk / Use of Security Force	Nothing Found
Community Programs, Initiatives & Benefit Sharing	Lynas sponsors the Balok Ivory Tower Academic Programme in Malaysia which assists local Kuantan students from underprivileged backgrounds gain placement at local universities. Company representatives met with the students several times during the year to discuss environmental protection and ways to stay safe at home and at school.

Figure 9. Lynas Corporation – Sustainability Issues and Approach

Community Dialogue & Grievance Procedures	<p>The IAEA independent review (released June 2011) of the LAMP, resulted in a number of recommendations including urging Lynas to intensify its communications with interested and affected parties in order to demonstrate how it will ensure the radiological safety of the public and the environment, specifically noting that lack of information had caused members of the public to conduct their own searches for information, leading to misunderstanding and misperceptions as well as unnecessary fears for public health and safety.</p> <p>Following the review, Lynas commenced its outreach and communications program with a briefing and site visit to the LAMP for 300 residents of the Balok community. For the period to 30 August, 2011, Lynas conducted face-to-face briefings, meetings and site visits with over 3,500 local residents, villagers, community leaders and their families.</p> <p>Lynas also agreed to complete a baseline health study of the plant which, according to Lynas, may be used in future by the local community to reaffirm that the LAMP does not affect employee or community health.</p>
Revenue Transparency	Nothing Found
Bribery & Corruption Policies	<p>Corrupt conduct, bribes or improper incentives prohibited under Code of Conduct and Whistleblower Policy.</p> <p>Whistleblower policy - employees are encouraged to report improper conduct including instances of corrupt behaviour to their country manager or to a member of the Executive Committee. The whistleblower's identity will be kept confidential. A whistleblower making a report in good faith is protected from retaliation.</p>
Company Reported Issues Highlighted by Stakeholders	The key issue is radiological safety, as discussed above.
Issues / Concerns highlighted by NGOs, Media or other	<p>In July 2011, the media reported protests by residents near Lynas' Malaysian plant, who opposed the operation because of health concerns and fears of leakage of radioactive and toxic materials into the water table. The reports claimed that internal memos and current and former engineers had also expressed safety concerns highlighting construction and design problems, including issues around standards of concrete and steel.</p> <p>Community concerns may have been exacerbated by problems associated with a Malaysian Japanese-owned rare earth refinery closed in 1992, described as "one of Asia's largest radioactive waste cleanup sites".</p> <p>In November 2011, the media reported an ongoing legal dispute over tenement rights of LYC's asset in Malawi.</p>

Source: Company Data, Citi Investment Research and Analysis

Figure 10. Medusa Mining – Sustainability Issues and Approach

Medusa Mining (MML.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	1,107
Index	ASX200
Year End	30-Jun
Operations	PHILIPPINES Gold miner - the Co-O mine (100% owned) and other development projects in the Philippines.
Status	Main producing asset is Co-O (undergoing phase 3 expansion, expected production mid 2013). Other major development, Bananghilig, expected production 2015.
Key ESG info reported	<p>Reports a few ESG metrics, including:</p> <ul style="list-style-type: none"> - Safety (FY11 data - Lost Time Accident Frequency Rate 1.63 / 1m hours worked. On 26 October 2011, an underground mining worker was killed in a shrinkage stope at the Co-O mine); - Environmental programs; - Community programs (inc. local training). <p>We asked the company whether historical injury or fatality data was available - Medusa has been producing at Co-O since 2005. The company confirmed that it had not reported injury data before FY11. It also confirmed that it did not report on fatalities apart from the October 2011 one, as the Board chose to resolve problems rather than publish, and the company commented that it was not required to report unless the fatality was material to operations. A CIRA analyst visiting the Co-O site in July/August 2010 learned of two recent fatalities.</p> <p>No sustainability targets found.</p>
Company Risks / Issues	
Government Issues	Medusa states that it has witnessed an upsurge of government facilitation of mining investments for foreign companies in the Philippines.
Issues/ Sustainability Focus Areas highlighted by Company	<p>Risks Identified by the Company Include:</p> <ul style="list-style-type: none"> - External risks (inc. Geographical location, political issues and environmental management); - Internal risks (inc. Compliance and people and skills). <p>Sustainability Areas of Focus Include:</p> <ul style="list-style-type: none"> - Health and safety; - Environmental management and monitoring (inc. water and land rehabilitation and reforestation); - Workforce; - Community participation, programmes and benefits. <p>Reforestation and carbon sink programmes to mitigate carbon emissions were adopted by Medusa as prescribed by the Philippines Government. These were a condition of the company's operation of the Co-O Mine.</p>
Security Risk / Use of Security Force	Medusa employs security personnel primarily to prevent unauthorised people entering the site and to prevent small scale pilfering and for safety reasons.
Community Programs, Initiatives & Benefit Sharing	<p>Medusa supports two scholarship programmes which commenced in 2003. Other education initiatives during the year included: Provision of teachers' salaries and support for training seminars for teachers to upgrade their teaching skills; provision of instructional materials; upgraded school buildings; provision of school supplies for students; and provision of daily bus services for high school students from remote areas to attend high school.</p> <p>MML is also involved in agricultural projects within the community (eg goat breeding, rice production financing, organic fertiliser, assistance with establishment of rubber plantations), day care centres and community health and dental programmes.</p>

Figure 10. Medusa Mining – Sustainability Issues and Approach

	<p>The Company has a policy of “buy and manufacture locally” whenever possible for the provision of goods and services to the project to maximise the multiplier effect locally.</p> <p>A 1% gross royalty on gold production is paid to indigenous groups.</p>
Community Dialogue & Grievance Procedures	In discussion, Medusa stated that it has a written procedure for addressing community grievances, with issues being documented and signed off.
Revenue Transparency	Payments to Government not explicitly disclosed.
Bribery & Corruption Policies	<p>Code of Conduct states that bribes, kickbacks, inducements or other illegal payments of any kind must not be made to or for the benefit of any government official (of any country), customer, supplier or any other party in connection with obtaining orders or favourable treatment or for any other purpose.</p> <p>This prohibition extends not only to direct payments but also to indirect payments made in any form through distributors, representatives, consultants, agents or other third parties.</p> <p>Employees are required to familiarize themselves with the code and to direct any queries they may have to the CEO or Company Secretary. All employees are requested to report immediately any circumstances which may involve deviation from the code to the CEO or Company Secretary.</p>
Company Reported Issues Highlighted by Stakeholders	N/A
Issues / Concerns highlighted by NGOs, Media or other	Nothing Found

Source: Company Data, Citi Investment Research and Analysis

Figure 11. Mirabela Nickel – Sustainability Issues and Approach

Mirabela Nickel (MBN.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	784
Index	ASX200
Year End	31-Dec
Operations	BRAZIL Nickel sulphide open pit Santa Rita mine in Brazil (100%)
Status	Entered commercial production in January 2010, full production scheduled end 2011. 23 year life and expansion potential. Mirabela describes the project as the "largest nickel sulphide project commissioned in the last decade".
Key ESG info reported	Mirabela reports a few ESG metrics, including: - Safety (FY10 data - LTIFR 1.1 / 1m hours worked; FY11 quarterly LTIFR 0.64-1.50 - includes contractors); - Environmental incidents (No reportable environmental incidents since the operating licence was issued in Dec 2006); - Workforce statistics (inc. gender); - Employee training. No sustainability targets found.
Company Risks / Issues	
Government Issues	Mirabela describes Brazil as a "pro-mining environment".
Issues/ Sustainability Focus Areas highlighted by Company	Sustainability areas of focus mentioned by Mirabela include: - Workforce (inc. wage equalisation, equal opportunity and training programs); - Health and safety; - Environment (inc. air quality, water, noise, waste, flora and fauna monitoring); - Community (inc. regional development through taxes, donations and in-kind assistance and building capacity locally).
Security Risk / Use of Security Force	From discussion with the company, we understand that Mirabela does employ a security company, security issues are not particularly high risk, and the company has not had any incidents of note.
Community Programs, Initiatives & Benefit Sharing	In 2010, Mirabela's contributions helped expand 12 municipal schools. Assistance was also given to a number of other community projects eg reforestation of surrounding communities; infrastructure for the supply centre in Ipiaú, as well as capacity building initiatives. The company supports environmental education projects geared towards the sustainable development of the region. Environmental Education Programs assisted more than 6,200 local students in 2010, covering issues such as flora conservation, general environmental awareness, environmental legislation as well as concerns relating to dengue fever, water quality and waste disposal. The company has a program to develop skills for potential employment at the Santa Rita Operation and to support other regional sustainable businesses such as agriculture. Initiatives are underway to improve local farming practices, increase marketability of local artisans, provide young people with an opportunity to learn a craft and support child sport development. Other initiatives include intern and apprentice programmes, to broaden the community's skill base. The Company's community investment policy provides for those areas of the community that require most support; education, health and public safety.
Community Dialogue & Grievance Procedures	The Mirabela Monitoring Committee provides a platform for the Santa Rita community to present concerns. Initiatives such as the "Beautiful Mine programme" enables members of the community to observe operations on a fortnightly basis.
Revenue Transparency	Payments to Government not explicitly disclosed.

Figure 11. Mirabela Nickel – Sustainability Issues and Approach

Bribery & Corruption Policies	<p>No explicit statement on bribery and corruption found in the company's Code of Conduct.</p> <p>All directors and employees have a responsibility to report breaches of the code or instances of unethical behaviour to a supervisor, management or an appropriate Board member.</p> <p>[We understand that the company believes its systems are well understood and working, but that development of a more structured robust governance system is currently underway.]</p>
Company Reported Issues Highlighted by Stakeholders	N/A
Issues / Concerns highlighted by NGOs, Media or other	Nothing Found

Source: Company Data, Citi Investment Research and Analysis

Figure 12. OceanaGold – Sustainability Issues and Approach

OceanaGold (OGC.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	667
Index	ASX200
Year End	31-Dec
Operations	<p>PHILIPPINES</p> <p>Didipio gold project in the Philippines (100%).</p> <p>(Also gold producer in NZ and exploration project in Australia (18% JV interest with Newcrest and Barrick Gold in the Junction Reefs project).</p>
Status	Philippines project scheduled to commence production in 2013
Key ESG info reported	<p>Comprehensive reporting of sustainability metrics including:</p> <ul style="list-style-type: none"> - Safety (FY10 data - LTIFR 3.45 / 1m hours worked. In 2009, a shooting incident at the Didipio project resulted in the death of a security contractor (investigation to determine who was responsible for the shooting is ongoing). Another fatality was recorded at the Didipio project site as a result of a weather related event (Typhoon Pedring) in September 2011 involving a contractor of OGC); - Environmental incidents (No incidents recorded in the Philippines in 2010. 3 minor events recorded in New Zealand, relating to depositional dust, water samples and suspended downstream water quality sediment exceedance associated with a heavy rainfall event); - Water consumed; - Land rehabilitation; - Workforce statistics (inc. gender); - Community expenditure. <p>Comprehensive tables with sustainability targets and performance reported in a number of areas including environment, community and health and safety for different operations.</p>
Company Risks / Issues	
Government Issues	Nothing Found
Issues/ Sustainability Focus Areas highlighted by Company	<p>Issues highlighted by the company include:</p> <ul style="list-style-type: none"> - Environmental compliance (inc. mine decommissioning and closure programs); - Energy use and GHG emissions; - Water; - Waste; - Biodiversity and land rehabilitation. <p>Oceana reports on company performance against internal annual environmental, community and health and safety targets and goals.</p>
Security Risk / Use of Security Force	In discussion, OGC confirmed that independent security contractors are employed on site. Contracts are reviewed regularly and contractors are monitored quite closely.
Community Programs, Initiatives & Benefit Sharing	<p>OGC's community initiatives include school scholarships, health and sports programs, infrastructure construction and agricultural assistance in the Philippines. Education has been a key focus for several years, with students funded by OGC university scholarships now working at the operations. OGC aims to set a standard for community involvement in the Asia Pacific mining industry.</p> <p>Company growth is expected to continue to expand OGC's capacity for community investment beyond the lifespan of its projects.</p>

Figure 12. OceanaGold – Sustainability Issues and Approach

	<p>A five year Social Development Management Program (SDMP) underpins the Company's community work plan and is a permitting requirement for the Didipio Project. The SDMP's objective is to provide sustained improvement in living standards of the host and neighbouring communities during the mine's life and after closure. In 2010, OGC's funding and support of the Didipio Community Development Association Incorporated (DCDAI) enabled a range of infrastructure projects to be completed (inc. roads, fences and a power house).</p>
Community Dialogue & Grievance Procedures	<p>All company business units offer feedback and grievance procedures that allow community members and stakeholder groups to express their views and/or concerns.</p> <p>OGC reports the number of community complaints by business unit and the number of unresolved complaints at the end of 2010 (5 complaints in the Philippines with 2 unresolved).</p> <p>The majority of Philippines complaints related to ongoing excess land claims, two of which have been resolved, as has a single complaint relating to a relocation issue.</p>
Revenue Transparency	Philippines production has not commenced.
Bribery & Corruption Policies	Code of Conduct states that all representatives of OGC, including directors, officers and employees and contractors acting on OGC's behalf must not accept or offer bribes or improper inducements to or from anyone. Whistleblower policy enables individuals to raise concerns including of bribery and corruption to their immediate supervisor or anonymously through a Whistleblower Hotline (externally monitored), without fear of reprisal.
Company Reported Issues Highlighted by Stakeholders	N/A
Issues / Concerns highlighted by NGOs, Media or other	<p>NGOs Oxfam and Friends of the Earth Australia flagged allegations in 2008 of harassment and intimidation and attempts to undermine the local council which opposed the proposed mine in the Philippines. Alleged tactics included pressuring people to sell land, legal threats against illiterate farmers, offering inducements to elected councillors, and inciting conflict and division within the community. Forced demolition of local community houses was also alleged.</p> <p>In Jan 2011 OGC acknowledged that it was aware of a resolution by the Commission on Human Rights of the Philippines in response to the allegations. The resolution found that OGC had violated rights to residence, freedom of movement, personal security and others. Among its findings, the CHR noted that OGC controls and supervises security forces who openly carry weapons and intimidate people. It also expressed concern about the potential for future operations to detrimentally impact the people's right to safe accessible water. The CHR recommended that the Government should consider the probable withdrawal of the agreement granted to OGC.</p>
Company Response	<p>OGC claimed that it had not been formally notified of the CHR's resolution, but that it continued to maintain its licence obligations and its commitment to ethical, responsible and sustainable mineral development. Pre-construction activities continue to be underway with first production expected in 1Q 2013.</p> <p>In discussion, OGC indicated to us that it had engaged with the previous director of the CHR, including a site visit and roundtable discussion, and that nothing untoward was found. The resolution was apparently issued under the new Director, who the company believed had not referred to the previous Director's work nor engaged with the company.</p> <p>Commenting on the expressed fears about water, OGC observed that the local river is polluted from past small scale mining, and will be cleaner under the company's operations.</p>
Citi Comment	We suspect the company may continue to face challenges with community relationships at Didipio.

Source: Company Data, Citi Investment Research and Analysis

Figure 13. Paladin Energy – Sustainability Issues and Approach

Paladin Energy (PDN.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	1,445
Index	ASX100
Year End	30-Jun
Operations	NAMIBIA, MALAWI Uranium projects in Namibia - Langer Heinrich (100% owned), Malawi - Kayelekera (85%, Malawi Government 15%) and Niger - Agadez (100%). (Also projects in Australia and Canada).
Status	Langer Heinrich and Kayelekera are operating mines. Exploration sites in Niger, Canada and Australia. Kayelekera is the first major mine and largest foreign investment in the Malawi's under-developed northern region.
Key ESG info reported	Reports a few ESG metrics, including: - Safety (FY11 data - LTIFR 1.1 / 1m hours worked; No fatalities); Paladin's safety reporting is among the most comprehensive of companies in this study. Data reported includes LTIFR, Fatalities, Duration rate, and is clearly provided by mine (inc. different status of operations, ie. construction and exploration), and clearly divided between employees and contractors. - Workforce statistics (inc. gender); - Employee training; - Community expenditure. PDN briefly mentions objectives in health and safety and water management (no details provided). The company indicated that it is collecting data using the GRI as a framework and expects to publish more data in a sustainability report in FY12 (including measurable objectives and progress for gender diversity).
Company Risks / Issues	
Government Issues	Due to the security situation caused by Al-Qaeda activities in northern Niger, no experienced expatriate personnel from Paladin could visit the project site. On-ground exploration was carried out by local staff, with technical guidance from Perth head office.
Issues/ Sustainability Focus Areas highlighted by Company	Issues and Sustainability Areas of Focus Include: - Health and safety; - Environment (inc. biodiversity, water, air emissions, waste, rehabilitation and mine closure planning); - Community (inc. capacity building, sanitation and agriculture programmes); - Workforce (inc. gender and turnover rates); - Water resource (in Namibia water is supplied from NamWater; in Malawi rainfall is quite high, runoff is used, and river water is extracted under licence).
Security Risk / Use of Security Force	We understand that the company has security teams on site. Further information not found.
Community Programs, Initiatives & Benefit Sharing	As a signatory to 'Enduring Value', Paladin's commitment to local communities is aligned with the 10 Sustainable Development Principles of the International Council on Mining and Metals (ICMM), which include contributing to the social, economic and institutional development of the communities in which the company operates and implementing effective and transparent engagement, communication and independently verified reporting arrangements with stakeholders. Paladin's Malawi mine is in the local community, whereas the Namibian mine is in national park, so the company's major community programs are in Malawi. Paladin is currently involved in initiatives including community health care (inc. funding the upgrade of a local hospital in Malawi), investing in agricultural programmes, water and sanitation, educational infrastructure and establishment of PDN's

Figure 13. Paladin Energy – Sustainability Issues and Approach

	<p>employee charitable foundation which funds smaller social projects in Malawi.</p> <p>Similar initiatives in Namibia focus on development of education, site-specific ecological improvement and regional economic development.</p>
Community Dialogue & Grievance Procedures	In discussion, Paladin commented that at its Malawi operation, community dialogue is a constant process.
Revenue Transparency	Payments to Governments not explicitly disclosed.
Bribery & Corruption Policies	<p>Code of Business Conduct and Ethics includes a statement that employees are required to comply with laws prohibiting bribery and improper payments. The code also covers payments to public officials as inducement to procuring or keeping business. The code applies to all directors, officers and employees including those employed by subsidiaries in all countries where PDN does business.</p> <p>Concerns of non-compliance with the code must be reported to the Company Secretary, in the case of employees, and to the Chairman of the Audit Committee, in the case of directors and officers. Violations or suspected violations may be submitted on a confidential basis. The group's Whistleblower Policy protects those reporting from any retaliation.</p> <p>To assist in the understanding by the local Malawian workforce, given language and cultural differences, a storybook dealing with the issues of fraud, corruption and whistleblowing has been written and translated into the local language.</p>
Company Reported Issues Highlighted by Stakeholders	Local matters identified through meetings with the Kayelekera community include issues such as road safety, water and hygiene and minimising the impact of unemployment arising from demobilisation of construction workers.
Issues / Concerns highlighted by NGOs, Media or other	<p>- A June 2011 report by Dutch research organisations WISE and SOMO (March 2011) expressed a "surprised" reaction that PDN had obtained permission from the Namibian Government to establish its mine in the natural protected area of Namib-Naukluft National Park. The report also highlighted the lack of substantial group policies (inc. safety, environment, whistleblowing and shareholder communication) and lack of information about energy and water consumption, GHG emissions, etc). Reportedly, PDN did not respond to WISE and SOMO's e-mails or requests for information.</p> <p>- Other issues raised include the Labour Resource and Research Institute's concern over the large volumes of water and electricity required for uranium mining, and the supply impact in Namibia (Feb 2009).</p> <p>- Another report by WISE and SOMO (March 2011) flagged that Paladin paid less royalties and taxes in Malawi than a group of comparable peers, and also classified PDN as the least transparent of the 4 companies reviewed. One of the criticisms was that PDN does not support the Extractive Industries Transparency Initiative, and that payments of taxes and royalties were not listed on a country-by-country basis.</p> <p>- In its 2010 Annual Report, Paladin referred to a human rights impact assessment of Kayelekera (Malawi) conducted by the US-based human rights research and policy organisation Nomogaia. The draft report indicated that all evidence suggests that Kayelekera is an extremely rights-responsible project - a model for other projects in remote areas with no mining history.</p>

Source: Company Data, Citi Investment Research and Analysis

Figure 14. PanAust – Sustainability Issues and Approach

PanAust (PNA.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	2,007
Index	ASX100
Year End	31-Dec
Operations	<p>LAOS, CHILE, THAILAND</p> <p>Laos - copper/gold and silver - Phu Kham Copper-Gold Operation, the Ban Houayxai Gold-Silver Project, and other exploration sites.</p> <p>Thailand - Puthep Copper mine (49% JV with Thai Padaeng Industry Public Company).</p> <p>Chile (interest in Inca de Oro Copper-Gold Project through a 90% interest in PanAust Minera, which holds a 66% interest in Inca de Oro S.A. (the owner of the project), with Codelco retaining a 34% interest).</p>
Status	<p>PanAust's main operation, Phu Kham, commenced production in 2008.</p> <p>First production for the Ban Houayxai scheduled for March 2012, and for Inca de Oro in 2014.</p> <p>Puthep development concept being evaluated.</p>
Key ESG info reported	<p>Comprehensive reporting of sustainability metrics, including:</p> <ul style="list-style-type: none"> - Health and safety (FY10 data - LTIFR 0.47 / 1m hours worked, TRIFR 3.57 / 1m hours worked; On 5 July 2011, PNA reported that severe rainfall led to the "probable" fatality of an excavator operator who was working on off-site road clearance activities when his excavator was swept away in a landslide.); - Environmental incidents (no material incidents, penalties or fines for non-compliance recorded in 2010. 45 low level incidents reported in total in 2010, for issues including air quality, land contamination, spills (mostly small losses of hydrocarbons), biodiversity and waste management. All issues, including minor ones, are investigated); - Waste, including acid rock drainage; - Water and energy consumed; - Land disturbance; - Workforce statistics (inc. gender); - Employee training (PNA discloses the number of training hours and training costs in several areas inc. health, safety and environment and other specific skills); - Community investment. <p>Comprehensive tables with sustainability targets and performance reported in a number of areas including environment, community and health and safety for different operations.</p>
Company Risks / Issues	
Government Issues	PanAust describes Laos as an excellent operating environment, with stable government.
Issues/ Sustainability Focus Areas highlighted by Company	<p>PNA's approach to "sustainability" revolves around risk management. Its risk matrix, or "Consequence Table", describes potential incidents (inc. health and safety, environmental, social, security, regulatory, production and financial), in terms of potential severity of consequence to the company (ie slight, low, medium, high and extreme). Early stage programs are underway in Thailand and Chile, as well as the activities in Laos.</p> <p>PNA's approach to reporting is detailed and transparent, identifying problem areas and discussing plans for improvement. Issues highlighted by the company include:</p> <ul style="list-style-type: none"> - Environmental (inc. management of surface water and mine waste, particularly acid-forming waste); - Community (inc. food production and availability); - Land disturbance and rehabilitation; - Biodiversity; - Health and Safety (including a program to improve road safety among concentrate haulage contractors); - Human resources (inc. retention and contractor capacity); - Human rights <p>PNA is a signatory to the International Cyanide Management Code.</p>

Figure 14. PanAust – Sustainability Issues and Approach

	<p>Internal benchmarking audit of Laos operations conducted in 2Q2010 identified deficiencies in compliance with the following internal standards, providing a basis for making improvements, with followup audits planned for 2011:</p> <ul style="list-style-type: none"> - Suppliers and contractors; - Risk and change management; - Leadership and accountability for development projects; - Environmental and social management. <p>Audits were also conducted against the World Bank / IFC Performance Standards. The 2010 score of 77% was up on 71% in 2009. Actions are underway to rectify critical areas.</p>
Security Risk / Use of Security Force	<p>PNA reports alignment with the UN Voluntary Principles on Security and Human Rights (though it does not appear to be a signatory). Private security guards perform access control and static guard duties without lethal weapons. PNA is required to work with the Laos People's Army and Lao Police, which both carry firearms. PNA has controls in place to reduce their carriage of firearms on site and when performing certain activities.</p> <p>Security is an area of focus for PNA. Security incidents were reported within the company's contract area in Laos in 2010. In most cases, operations were not impacted or were remote from the incident. The prevalence of guns in the community and criminal activity meant that PNA enhanced security precautions in 2H2010 in remote areas and when the perceived threat level increased in the vicinity of operations or access roads. Risk management includes assessment of human rights impacts against the 1984 Declaration of Human Rights. In 2010, asset protection staff received training (inc. human rights elements) in security procedures, foot patrol, methods of restraint, search person, vehicle and building, crisis management and crowd control.</p>
Community Programs, Initiatives & Benefit Sharing	<p>The Company works with villages and local authorities to improve living standards by providing resources and developing long-term opportunities and capability within local communities. Community development programs focus on: education (adult education and school-aged students), healthcare, agriculture, water and sanitation, infrastructure, and small business development. In Laos, these programs are aligned with the government's National Socio-economic Development Plan and the National Growth and Poverty Eradication Strategy. PNA has budgeted US\$170,000 for 2011 community development activities in Laos, and US\$130,000 for communities in Thailand.</p> <p>PanAust also provides sponsorship and donations to particular programs. Principles applied include: Transparency (details of donations must stand up to internal and external scrutiny; Independence (donation must not create sense of obligation) and Integrity (donation must enhance the image and uphold the integrity of PanAust).</p> <p>Employing local businesses ensures that a significant portion of expenditure in the area flows back into the Lao-based companies.</p> <p>At a national level, PanAust currently accounts for approximately 10% of the nation's estimated GDP and has, to date, invested around US\$700 million in Laos. PanAust spent ~US\$115 million with Lao-based companies for the provision of goods and services in 2010.</p>
Community Dialogue & Grievance Procedures	<p>Grievance and request mechanism in place to identify, prioritise and respond to local and regional stakeholder concerns. No material grievance reports in 2010. PanAust reports the number of events processed and fines paid (120 minor incidents relating to concerns, complaints and compensation received in 2010. During the year, US\$169,000 was paid in compensation for land access and minor livestock losses associated with the presence of the company's activities).</p>
Revenue Transparency	<p>Royalties, taxes and tenement fees paid to the Government of Laos reported (approximately US\$57million in 2010). A detailed table of payments for 2008, 2009 and 2010 is provided.</p>
Bribery & Corruption Policies	<p>Code of Conduct states that the PanAust group will not pay any bribes or corrupt payments to government officials to obtain improper or illegitimate benefit or advantage, including the securing of any development approval or licence. During 2010 there were no instances of bribery and corruption reported to the Board or management.</p> <p>Employees receive training that explicitly addresses the company's position on inappropriate payments or inducement as part of their induction.</p> <p>Employees must raise any concerns regarding breaches of the Code to their managers, or anonymously to the Company Secretary and General Counsel, and are protected from any retaliation.</p> <p>In discussion, PNA was adamant that inducements do not have to be paid in Laos, and cited the example of terminating a promising employee for requesting a "backhanders".</p>
Company Reported Issues Highlighted by Stakeholders	<p>PNA discloses sustainability interests and concerns raised by stakeholder groups including by communities near its projects in Laos, Thailand and Chile and by NGOs. These include socio-economic contributions, access to employment, environmental performance, governance, risk management and human rights.</p>
Issues / Concerns highlighted by NGOs, Media or other	<p>Nothing Found</p>

Source: Company Data, Citi Investment Research and Analysis

Figure 15. Perseus Mining – Sustainability Issues and Approach

Perseus Mining (PRU.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	1,418
Index	ASX200
Year End	30-Jun
Operations	GHANA, IVORY COAST (also KYRGYZ REPUBLIC, GUINEA) Gold projects in West Africa: Ghana - the Edikan Gold Mine, formerly known as the Central Ashanti Gold Project, and Grimesa gold project (both 90% owned with government right to 10%); Ivory Coast - Tengrela Gold project (80% owned after allowance for Government's right to 10% and 10% held by local JV partner, SOMICI). Also gold exploration in Kyrgyz Republic (through 28% stake in ASX-listed Manas Resources), and gold exploration in Guinea (through 23% stake in ASX-listed Burey Gold Limited).
Status	Production from Edikan commenced in August 2011. If proven economic by the current feasibility study, PRU is targeting production at Tengrela by the start of 2013.
Key ESG info reported	Company recently commenced production (August 2011). Negligible reporting of ESG metrics. - Safety (1 Lost Time Injury occurred in 2011, and 1 fatality involving an employee of a contractor at Edikan Gold mine). PRU briefly mentions targeted health and safety standards (no details provided).
Company Risks / Issues	
Government Issues	- PRU identified potential changes to regulatory regime and political stability in host countries as among the company's main areas of risk. - PRU describes the Ivory Coast as one of Africa's best developed countries, with good infrastructure and a relatively sophisticated bureaucracy. A recent regime change may lead to better governance.
Issues/ Sustainability Focus Areas highlighted by Company	Areas of Risk and Sustainability Focus Include: - Community (inc. local infrastructure improvement and social projects); community dissatisfaction mentioned as a risk; - Environment (inc. complying with local environmental laws and providing safeguards and contingency plans), company mentions groundwater monitoring programs, and sampling for acid rock drainage; - Occupational health and safety (inc. contractors and visitors, with training provided); - Labour and associated employment risks.
Security Risk / Use of Security Force	From discussion with the company, we understand that PRU employs security personnel who are local people, but security is low level, and arms are not carried on site.
Community Programs, Initiatives & Benefit Sharing	In Ghana, a fund has been established by Perseus into which annual payments will be deposited. The fund will be administered by representatives of the local community who will be responsible for determining priorities and executing selected local community development projects. Perseus has also been directly involved in various community programs including construction of six- classroom schools with sanitation facilities, library and stores in the nearby villages of Abnabna and Fobinso. PRU has also assisted local residents to establish small businesses that will be sustainable after the end of mining and site rehabilitation. PRU also reports involvement in projects in Ghana around power line, road and water infrastructure. In the Ivory Coast (project at exploration stage), exploration crews have assisted local communities with construction of water storage facilities, employment of local citizens and donating to local charitable causes.
Community Dialogue & Grievance Procedures	As part of the Central Ashanti Gold Project permitting, extensive public consultation was undertaken. Comments and issues raised fed into the Environmental Impact Statement which formed the basis for project approval by the Environmental Protection Agency (EPA).

Figure 15. Perseus Mining – Sustainability Issues and Approach

	<p>The Company has established a Community Information Office in Ayanfuri (Ghana) where community members can raise any concerns.</p> <p>Regular meetings involve local chiefs and the public. Various consultative committees include the Women's Consultative Committee and Employment and Compensation Negotiation committees.</p>
Revenue Transparency	<p>Ghana is an EITI compliant country.</p> <p>In discussion, the company indicated that it is likely to disclose transparently once in production, and sees benefit in making its contribution transparent.</p>
Bribery & Corruption Policies	Nothing Found
Company Reported Issues Highlighted by Stakeholders	Nothing Found.
Issues / Concerns highlighted by NGOs, Media or other	<p>- Social risk: PRU needs to relocate around 400 dwellings to allow total access to its gold resources. Whilst PRU has approval from the local community for the relocation, any public discontent with the move could delay the process and affect when PRU can achieve its maximum mill capacity and gold output. (Source: CIRA report, "Australian Gold Sector", 5 July 2011)</p>

Source: Company Data, Citi Investment Research and Analysis

Figure 16. Resolute Mining – Sustainability Issues and Approach

Resolute Mining (RSG.ASX)

Context	
Market Cap (A\$m as at 5 Dec 2011)	946
Index	ASX200
Year End	30-Jun
Operations	TANZANIA, MALI Syama gold mine in Mali (80% RSG; 20% Malian Government); Golden Pride gold mine in Tanzania (100%). (Also Ravenswood Gold mine in Australia (100%)).
Status	RSG's main producing asset is Syama (production started FY10). Production at Golden Pride is expected to decline as mine approaches the end of its life, with less than 2 years left.
Key ESG info reported	Reports a few ESG metrics, including: - Safety (FY11 data - LTIFR 0.0 / 1m hours worked in Tanzania, 0.8 in Mali and 5.43 in Australia); - Land rehabilitation; - Employee training. RSG briefly mentions environmental objectives (no details provided).
Company Risks / Issues	
Government Issues	Nothing Found.
Issues/ Sustainability Focus Areas highlighted by Company	Sustainability areas of focus mentioned include: - Environment (inc. closure plans and land rehabilitation (in particular for Golden Pride), and management of water, waste, emissions to air and tailings); - Community (inc. local health, access to clean drinking water and capacity building); - Workplace health and safety (inc. incident investigation and hazard identification). Cyanide - from discussion with the company, we understand that RSG pursues the trail from supply to site to International Cyanide Management Code standards, and manages on site according to local standards - at some later point RSG may consider signing the ICMC.
Security Risk / Use of Security Force	From discussion with the company, we understand that RSG employs security personnel, mainly to protect against theft, and incidents do not generally involve physical clashes. The environment is not hostile.
Community Programs, Initiatives & Benefit Sharing	Resolute supports both new and long running community development programmes to improve infrastructure, education, health and the environment. Communities help to determine priorities and must contribute to the projects, for example with labour. Key areas supported by Resolute in Tanzania in 2011 included: Building projects (inc. construction of a police station, housing for teachers, medical dispensaries and specialty school rooms); Community health (inc. health tests and treatment of school children, HIV/AIDS awareness training, and hospital assistance); Water bore installation and expansion of local dam and training and capacity building. Initiatives in Mali included investment in community health, education, housing, water supply and dust control. <i>[The UN reported in 2009 that in response to concerns raised by groups including Oxfam, Tanzanian government officials were reviewing mining contracts in an attempt to make them more beneficial for local communities. Companies including Resolute agreed to pay annual levies to the government for both local and national development projects. As part of the review, these companies would also be required to buy local products and services where available.]</i>
Community Dialogue & Grievance Procedures	Resolute is committed to: - Providing management systems to identify, assess, monitor and control existing and potential impacts on communities;

Figure 16. Resolute Mining – Sustainability Issues and Approach

	<p>- Maintaining an 'open door' policy whereby the local traditional leaders and community leaders have access at reasonable times to the Company's management.</p> <p>Monthly community committee meetings discuss and attempt to resolve issues and grievances. Some issues are resolved among the communities, who present a solution to the company, for example about which villages or age demographics are preferentially employed in Mali.</p>
Revenue Transparency	<p>Royalties, employer taxes and company taxes paid to governments are reported by country. Total paid equivalent to A\$60m in 2011, including A\$31m in Tanzania and A\$13m in Mali. In 2010, payments totalled A\$56m, including \$28m in Tanzania and \$15m in Mali.</p> <p>RSG believes that disclosure helps it to communicate its contribution to countries it operates in.</p> <p>Despite this good level of disclosure, RSG is not at present an EITI signatory (this is simply an observation, not a criticism).</p>
Bribery & Corruption Policies	<p>Code of conduct does not explicitly cover bribery and corruption. Employees required to report suspected fraud or attempted fraud, and any mysterious disappearance of funds or securities. Reporting may be anonymous, and done by contacting management, the Company Secretary who is responsible for ensuring such matters are addressed and resolved, or the CEO. RSG encourages personnel to report possible violations of law or RSG's ethical standards. RSG prohibits retaliatory action against any individual for raising legitimate concerns or questions regarding ethics matters or for reporting suspected violations.</p> <p>A leadership training course for village leaders was sponsored to create awareness on combating corruption and improving governance for Nata, Nzega Ndogo and Lusu wards in Tanzania.</p> <p>In discussion, the CEO commented that one can do business without paying bribes, and that if a company doesn't pay bribes, eventually people stop asking.</p>
Company Reported Issues Highlighted by Stakeholders	<p>Expectations of communities in Mali in 2010 included support for road construction, control of dust levels, building classrooms and water supply.</p>
Issues / Concerns highlighted by NGOs, Media or other	<p>Nothing Found</p>

Source: Company Data, Citi Investment Research and Analysis

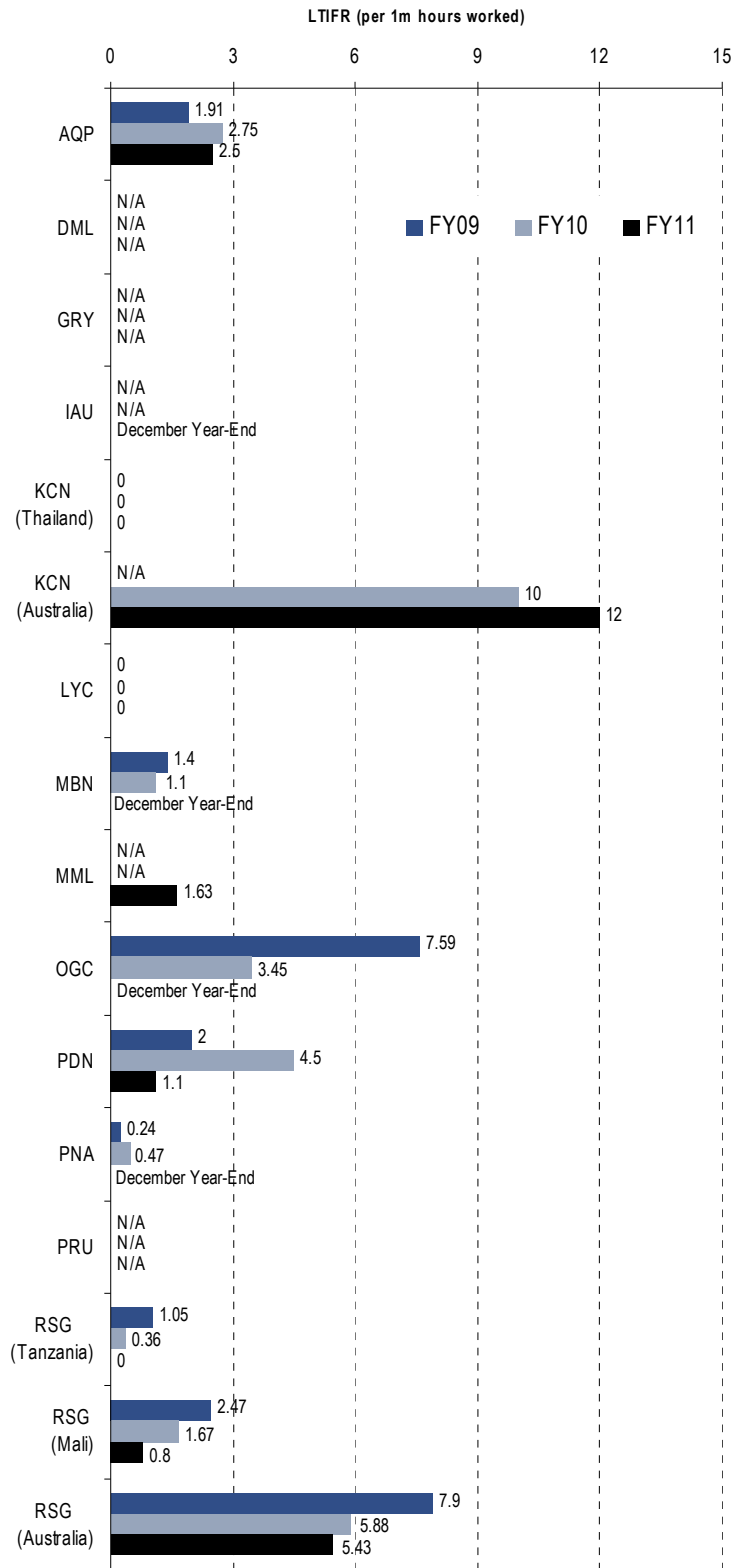
Safety

Companies' Safety Performance and Management

Companies' injury data is shown in Figure 17 and fatalities information in Figure 18 for the period FY09 to present. Where companies did not explicitly disclose fatalities information, we made enquiries, and the verbal answers we received are identified "g" in Figure 18.

- **Aquarius Platinum** has the most fatalities in this study. The company has implemented new safety measures including measure to prevent fall of ground, as discussed in Figure 4.
- All producing companies except **Medusa** have disclosed historical safety data. Medusa has been producing at Co-O since 2005. We are aware of at least three fatalities, but only recent data has been officially reported.
- **Aquarius** and **Medusa** operate underground mines, where safety is generally more challenging than at opencut operations. By comparison **Kingsgate** in Thailand, with an excellent safety record, is opencut.
- Reported Lost Time Injury Frequency Rate (LTIFR) data tends to show lower injury rates in developing countries than developed countries (this can be seen in divisional data plotted for **Kingsgate** and **Resolute** in Figure 17). **Oceana's** Philippines injury rate is lower than the company's average rate, due to higher injury rates in New Zealand. We have observed this trend in our December 2010 analysis of safety across the ASX100 companies. That research also showed that most ASX100 mining companies reported company average LTIFR numbers of between 1 and 4 per million hours in FY10 – the data in this study appears consistent with that range.
- When asked how it had achieved an LTIFR of zero, one company operating in Asia made several observations. Firstly, the culture may involve people trying to "go to work at all costs"; secondly where labour costs are lower there may be "more hands" available to perform a task safely (eg to hold the ladder); and thirdly people may learn effectively to follow the letter of the rule, rather than take shortcuts, particularly when workplace processes are dramatically different from life "outside the (plant) fence".
- Conversely, a company operating in Africa commented that it can be challenging to instill rigorous safety procedures, given the limited attention to safety in everyday life.

Figure 17. Lost Time Injury Frequency Rate per 1 Million Hours Worked (FY09-FY11)



Source: Company data, Citi Investment Research and Analysis

Figure 18. Details of Individual Fatalities FY09 to Present (What Happened? Where? To Whom?)

Company	Year	No: Employees	No: Contractors	No: not Specified	No: Other	Country	Location (eg City, Site, etc as available)	What happened?
Aquarius Platinum	FY09		1			South Africa	Kroondal	A fitter assistant , employee of former contractor Redpath Mining, died at Kroondal's K5 shaft.
Aquarius Platinum	FY09		1			South Africa	Kroondal	An employee of former contractor Redpath Mining died in an accident involving a load haul dump vehicle.
Aquarius Platinum	FY09		1			South Africa	Marikana	A mechanical assistant, employee of MCC Contracts, died at the Marikana mine.
Aquarius Platinum	FY10			3		South Africa	Blue Ridge	Three fatalities at Blue Ridge since its acquisition in July 09. Causes were: individual overcome by noxious gases; accident while barring ore pass; fall of ground at stoping face.
Aquarius Platinum	FY11		5			South Africa	Marikana	Five MRC contractors died as a result of fall of ground (a block of rock weighing approximately 500 tonnes fell from the hanging wall).
Aquarius Platinum	FY11			1		South Africa	Kroondal	Got caught between two load haul dump machines on surface at the start of the shift.
Aquarius Platinum	FY11		1			Zimbabwe	Mimosa	An acting machine operator was killed in an explosion when an operating rock drill intersected a socket containing misfired explosives.
Aquarius Platinum	FY11			1		South Africa	Blue Ridge	Blasting accident caused by a failure to follow ignition procedures.
Discovery Metals	FY09							No fatalities *
Discovery Metals	FY10							No fatalities *
Discovery Metals	FY11							No fatalities *
Gryphon Minerals	FY09							No fatalities *
Gryphon Minerals	FY10							No fatalities *
Gryphon Minerals	FY11							No fatalities *
Intrepid Mines	FY09							Not Disclosed
Intrepid Mines	FY10							Not Disclosed
Intrepid Mines	FY11 (Dec. y/e)							
Kingsgate Consolidated	FY09							No fatalities *
Kingsgate Consolidated	FY10							No fatalities *
Kingsgate Consolidated	FY11							No fatalities *
Lynas Corporation	FY09							No fatalities *
Lynas Corporation	FY10							No fatalities *
Lynas Corporation	FY11							No fatalities *

Figure 18. Details of Individual Fatalities FY09 to Present (What Happened? Where? To Whom?)

Company	Year	No: Employees	No: Contractors	No: not Specified	No: Other	Country	Location (eg City, Site, etc as available)	What happened?
Medusa Mining	FY09							Not Disclosed
Medusa Mining	FY10							Not Disclosed
Medusa Mining	FY11							A CIRA analyst visiting the Co-O site in July/Aug 2010 learned of two recent fatalities.
Medusa Mining	FY12	1				Philippines	Co-O Gold mine	An underground mining worker was killed in a shrinkage stope. The broken ore upon which the miner was standing collapsed due to an undetectable cavity caused by bridging above the full ore chute.
Mirabela Nickel	FY09							No fatalities *
Mirabela Nickel	FY10							No fatalities *
Mirabela Nickel	FY11 (Dec. y/e)							No fatalities YTD*
OceanaGold	FY09		1			Philippines	Didipio	A shooting incident resulted in the death of a security contractor.
OceanaGold	FY10							No fatalities *
OceanaGold	FY11 (Dec. y/e)		1			Philippines	Didipio	Fatality as a result of a weather related event (Typhoon Pedring).
Paladin Energy	FY09		2			Malawi	Kayelekera uranium	Flash fire of thinning spirits in a gypsum precipitation tank.
Paladin Energy	FY10	1				Malawi	Kayelekera mine	Bus accident.
Paladin Energy	FY10		1			Malawi	Kayelekera mine	Overturning of a small concrete transport vehicle during construction.
Paladin Energy	FY11							No fatalities
PanAust	FY09		1			Laos	Phu Kam	Subcontractor fatally injured when his semi-trailer carrying copper concentrate veered off the public road between the mine site and Vientiane.
PanAust	FY09		1			Laos	Phu Kam	Subcontractor killed injured when his backhoe overturned while undertaking road maintenance between the mine site and Vientiane.
PanAust	FY09		1			Laos	Phu Kam	Subcontractor killed while changing a truck tyre.
PanAust	FY10							No fatalities
PanAust	FY11 (Dec. y/e)		1			Laos	Phu Kam	On 5 July 2011, PNA reported that severe rainfall led to the "probable" fatality of an excavator operator who was working on off-site road clearance activities when his excavator was swept away in a landslide.
Perseus Mining	FY09							N/A (exploration only)
Perseus Mining	FY10							N/A (exploration only)
Perseus Mining	FY11		1			Ghana	Edikan Gold Mine	Employee asleep in wrong area was run over.
Resolute Mining	FY09							No fatalities *
Resolute Mining	FY10							No fatalities *
Resolute Mining	FY11							No fatalities *

Source: Company data, Citi Investment Research and Analysis. Note: * Where information was received verbally from the company.

Country Risk

Country Risk Perspectives

For the countries most relevant to companies in this study, we used three different sources to gain perspectives on “country risk” (Figure 19), and combined them to arrive at a final “average” risk assessment (Figure 20).

The key criteria adopted for our risk assessment are explained alongside Figure 19. In Figure 22 we list each country, giving its CPI score, Fraser Institute score, a summary of issues identified by the US State Department, whether the country is a signatory to the Extractives Industry Transparency Initiative, and which companies covered in this study operate in that country.

Figure 19. Assessing “Country Risk” – CPI, PPI and US State Department

Transparency International CPI:

Very High Risk < 2.5;
High Risk ≥ 2.5 and < 3.5;
Medium Risk ≥ 3.5 and < 5
Low Risk ≥ 5

Fraser Institute PPI:

Very High Risk < 2.5;
High Risk ≥ 2.5 and < 3.5;
Medium Risk ≥ 3.5 and < 5
Low Risk ≥ 5

US State Dept Human Rights Report:

Very High Risk - for instances including pervasive or endemic corruption, slavery including of children, killings, torture, etc.;

High Risk – for instances including official corruption, child labor, failure to enforce labor laws, etc.;

Medium Risk - for instances including restricted freedom of press, cases of discrimination against women and ethnic minorities, etc.;

Low Risk - for instances including isolated reports of excessive use of force by the police, poor prison conditions, etc.

Transparency International Corruption Perception Index			
Very High	High	Medium	Low
Guinea	Burkina Faso	Brazil	Botswana
Ivory Coast	Ecuador	Ghana	Chile
Kyrgyz Republic	Indonesia	Malaysia	
Laos	Malawi	Namibia	
Mauritania	Mali	South Africa	
Zimbabwe	Mexico		
	Niger		
	Philippines		
	Tanzania		
	Thailand		
Fraser Institute Policy Potential Index			
Very High	High	Medium	Low
Ecuador	Brazil	Burkina Faso	Botswana
Indonesia	Ghana	Kyrgyz Republic	Chile
Philippines	Guinea	Mali	
South Africa	Niger	Mexico	
Tanzania		Namibia	
Zimbabwe			
US State Department Human Rights Issues			
Very High	High	Medium	Low
Guinea	Brazil	Laos	Botswana
Indonesia	Burkina Faso	Malaysia	Chile
Ivory Coast	Ecuador	Namibia	
Kyrgyz Republic	Ghana		
Mauritania	Malawi		
Niger	Mali		
Philippines	Mexico		
Thailand	South Africa		
Zimbabwe	Tanzania		

Source: Transparency International, Fraser Institute, US State Department

Figure 20. Citi Assessment of Country Risk

Very High	High	Medium	Low
Guinea (PRU)	Brazil (MBN)	Malaysia (LYC)	Botswana (DML)
Indonesia (IAU)	Burkina Faso (GRY)	Namibia (PDN)	Chile (KCN, PNA)
Ivory Coast (PRU)	Ecuador (IAU)		
Mauritania (GRY)	Ghana (PRU)		
Philippines (OGC, MML)	Kyrgyz Republic (PRU)		
Zimbabwe (AQP)	Laos (PNA)		
	Malawi (PDN)		
	Mali (RSG)		
	Mexico (IAU)		
	Niger (PDN)		
	South Africa (AQP)		
	Tanzania (RSG)		
	Thailand (KCN, PNA)		

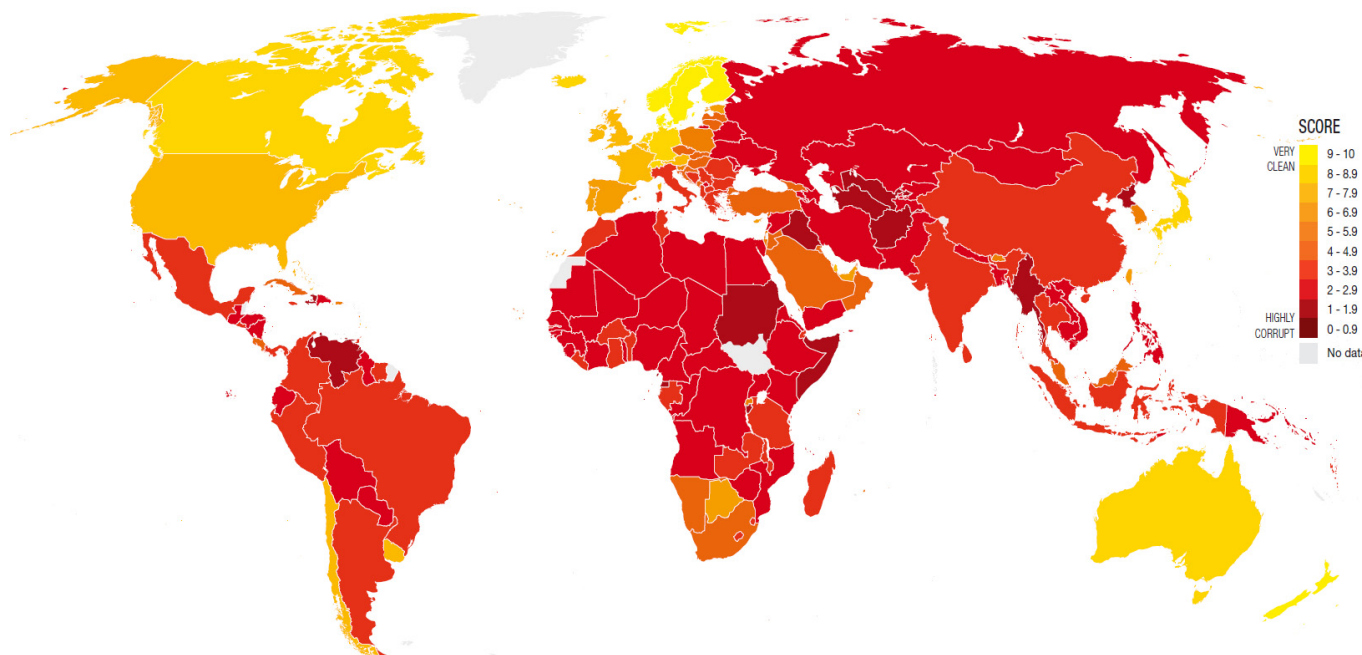
Source: Transparency International, Fraser Institute, US State Department, Citi Investment Research and Analysis

Corruption Perceptions Index 2011

Transparency International, a non-governmental organization, publishes a Corruption Perceptions Index (CPI) that is widely used as an indicator of where bribery is considered most prevalent.

The CPI ranks countries according to perception of corruption in the public sector, based on a variety of assessments and opinion surveys. Questions focus around bribery of public officials, kickbacks in public procurement, embezzlement of public funds, and the strength and effectiveness of public sector anti-corruption efforts. The 2011 survey covers 182 countries for which data was available. Higher risk countries, with a score of <5.0, are shown in orange or red in the map in Figure 21.

Figure 21. Corruption Perceptions Index 2011 – World Map



Source: Transparency International

The Fraser Institute Policy Potential Index Rank 2011

The Fraser Institute, a Canadian-based independent research organization, conducts an annual survey of metal mining and exploration companies to assess how mineral endowments and public policy factors such as taxation, regulatory uncertainty (inc. environmental, native land claims and protected areas), political stability, infrastructure, socioeconomic agreements, labor issues, security and other factors affect exploration investment.

In 2011, the Institute added questions on the reliability of legal systems, “legal processes that are fair, transparent, non-corrupt, timely, efficiently administered, etc.,” trade barriers, and on whether uncertainty is growing or lessening in each jurisdiction.

Survey results represent the opinions of executives and exploration managers in mining and mining consulting companies operating around the world. The 2011 survey included data on 79 jurisdictions around the world.

The Policy Potential Index (PPI) measures the overall policy attractiveness of these jurisdictions. A jurisdiction that ranks first under the “Encourages Investment” response in every policy area would have a score of 100; one that scored last in every category would have a score of 0.

Extractive Industries Transparency Initiative (EITI)

The EITI is a coalition of governments, companies, civil society groups, investors and international organizations. It aims to improve transparency and accountability, aiming to ensure that natural resources benefit all people living in resource-rich countries, helping to foster growth and reduce poverty.

Specifically, the EITI encourages transparency of company payments and government revenues derived from oil, gas and mining developments.

Country signatories commit to reconciling company payments and government revenues. EITI company signatories disclose payments made to governments.

- EITI compliant countries analyzed in this study at November 2011 were Ghana, Kyrgyz Republic, Mali and Niger.
- Burkina Faso, Guinea, Indonesia, Ivory Coast, Mauritania and Tanzania have achieved ‘Candidate’ status and are working towards compliance.

Figure 22. Country Risk Details (sourced from CPI, PPI, EITI and US State Department)

Country	EITI	TI Corruption Perception Index 2011	Policy Potential Index Rank 2011*	Issues Identified by the US State Department	Companies Operating in the Country
Botswana		6.1	14	<ul style="list-style-type: none"> - Lengthy delays in judicial processes; - Child labour; - Restrictions on press freedom; - Discrimination (inc. against women, persons with disabilities and sexual orientation); - Child abuse; - Trafficking in persons; - Restricted right to strike; - Poor prison conditions and abuse of detainees by security forces. 	Discovery Metals
Brazil		3.8	49	<ul style="list-style-type: none"> - Reluctance to prosecute and inefficiency in prosecuting government officials for corruption; - Violence and discrimination against women, indigenous persons and minorities and children; - Failure to enforce labour laws; - Forced labor and child labor in the informal sector; - Poor prison conditions and abuse of detainees by security forces; - Prolonged pretrial detention and inordinate delays of trials; - Inability to protect witnesses involved in criminal cases; - Human rights violators often enjoyed impunity; - Trafficking in persons. 	Mirabela Nickel
Burkina Faso	Candidate	3.0	24	<ul style="list-style-type: none"> - Use of excessive force by security force against civilians, criminal suspects and detainees; - Arbitrary arrest and detention; - Official corruption and impunity; - Judicial inefficiency and lack of independence; - Occasional restrictions on freedom of assembly; - Societal violence and discrimination against women, children and persons with disabilities; - Child labor; - Trafficking in person; - Poor prison conditions and abuse of detainees by security forces. 	Gryphon Minerals
Chile		7.2	8	<ul style="list-style-type: none"> - Isolated reports of excessive use of force and mistreatment by police forces, physical abuse in jails and prisons, and generally substandard prison conditions. - Government generally took steps to investigate and punish abusers. 	Kingsgate Consolidated; PanAust
Ecuador		2.7	65	<ul style="list-style-type: none"> - Corruption and other abuses by security forces; - Isolated unlawful killings and use of excessive force by security forces, sometimes with impunity; - Corruption and denial of due process within the judicial system; - Societal discrimination and violence against women, and discrimination against children, indigenous persons, sexual orientation; - Trafficking in persons; - Sexual exploitation of minors; - Child labor; - Verbal and legal attacks against the independent media made by the president and his administration; - Poor prison conditions and abuse of detainees by security forces; - Arbitrary arrest and detention; High number of pretrial detainees. 	Intrepid Mines
Ghana	Compliant	3.9	47	<ul style="list-style-type: none"> - Use of excessive force by police, which resulted in deaths and injuries; - Ethnic killings and vigilante violence; - Police impunity; - Arbitrary arrest of journalists; - Corruption in all branches of government; - Violence against women and children; - Discrimination and violence against women, persons with disabilities, sexual orientation, political view; - Trafficking in women and children; - Child labor including forced child labor. 	Perseus
Guinea	Candidate	2.1	51	<ul style="list-style-type: none"> - Use of excessive force by security forces resulting in civilian deaths and injuries; - Vigilante killings and ethno-religious violence; - Torture and abuse of prisoners, including rape and inhumane and life threatening prison conditions; - Arbitrary arrests, prolonged pretrial detention and incommunicado detention; - Lack of judicial independence; - Official corruption; - Restrictions on freedom of speech, press, assembly, association, and movement; - Attacks on human rights workers; - Sexual violence against women and girls; - Societal discrimination against women; - Ethnically based harassment by civilian supporters of opposition political parties; - Trafficking in persons; - Ethnic discrimination, and forced labor, including by children. 	Perseus
Indonesia	Candidate	3.0	70	<ul style="list-style-type: none"> - Official corruption including the judicial system, with impunity for some officials; - Occasional incidents of arbitrary and unlawful killings by security forces; - Some limitations on freedom of expression; - Societal abuse against religious groups and interference with freedom of religion sometimes with the complicity of local officials; - Trafficking in persons; - Child labor; - Failure to enforce labor standards and worker rights; - Vigilantism; - Sometimes harsh prison conditions. 	Intrepid Mines

Figure 22. Country Risk Details (sourced from CPI, PPI, EITI and US State Department)

Country	EITI	TI Corruption Perception Index 2011	Policy Potential Index Rank 2011*	Issues Identified by the US State Department	Companies Operating in the Country
Ivory Coast	Candidate	2.2	n/a	<ul style="list-style-type: none"> - Restriction of citizens' right to change their government; - Arbitrary and unlawful killings, including summary executions; - Torture and cruel, inhuman, or degrading treatment and punishment, rape and sexual assault of civilians; - Life threatening prison and detention center conditions; - Official impunity; - Arbitrary arrest and detention; - Denial of fair public trial; - Arbitrary interference with privacy, family, home, and correspondence; - Police harassment and abuse of noncitizen Africans; - Use of excessive force and other abuses in internal conflicts; - Restrictions on freedoms of speech, press, peaceful assembly, association, and movement; - Official corruption and extortions; - Discrimination, violence against women, child abuse, exploitation, including forced and hazardous labor; - Trafficking in persons. 	Perseus
Kyrgyz Republic	Compliant	2.1	39	<ul style="list-style-type: none"> - Arbitrary killings, torture, and abuse by law enforcement officials; - Impunity; - Poor prison conditions; - Arbitrary arrest and detention; - Lack of judicial independence; - Pressure on NGOs and opposition leaders, including government harassment; - Pressure on independent media; - Government detention of assembly organizers; - Authorities' failure to protect refugees adequately; pervasive corruption; - Discrimination against women, persons with disabilities, ethnic and religious minorities, and other persons based on sexual orientation or gender identity; - Child abuse; - Trafficking in persons; - Child labor. 	Perseus
Laos		2.2	n/a	<ul style="list-style-type: none"> - The central government continued to deny citizens the right to change their government; - Prison conditions were harsh and at times life threatening; - Corruption in the police and judiciary persisted; - The government infringed on citizens' right to privacy and did not respect the rights to freedom of speech, the press, assembly, or association; - Local officials at times restricted religious freedom and freedom of movement; - Trafficking in persons; - Workers' rights were restricted. 	PanAust
Malawi		3.0	n/a	<ul style="list-style-type: none"> - Police use of excessive force, which resulted in deaths and injuries; - Security force impunity, although the government made some efforts to prosecute abusers; - Occasional mob violence; - Harsh and life-threatening prison conditions; - Arbitrary arrest and detention; - Lengthy pretrial detention; - Limits on freedom of speech and the press; - Official corruption; - Societal violence against women; - Trafficking in persons; - Child labor. 	Lynas Corporation, Paladin Energy
Malaysia		4.3	n/a	<ul style="list-style-type: none"> - Some deaths occurred during police apprehensions and while in police custody; - Police abuse of detainees; - Overcrowded immigration detention centers; - Arbitrary arrest and detention using statutes that allow detention without trial; - Persistent questions about the impartiality and independence of the judiciary; - Government continued to pursue the prosecution of a prominent opposition leader on sodomy charges; - The criminal and Sharia courts utilized caning as a form of punishment; - The government continued to restrict freedom of press, association, assembly, speech, and religion; - Trafficking in persons remained a problem; - Longstanding government policies gave preferences to ethnic Malays in many areas; - Some employers exploited migrant workers and ethnic-Indian citizens through forced labor; - Some child labor occurred in plantations. 	Lynas Corporation
Mali	Compliant	2.8	29	<ul style="list-style-type: none"> - Arbitrary or unlawful deprivation of life; - Police abuse of civilians; - Poor prison conditions; - Arbitrary detention, lengthy pretrial detention, prolonged trial delays; - Executive influence over the judiciary; - Lack of enforcement of court orders; - Restrictions on freedom of speech and assembly; - Official corruption and impunity; - Domestic violence and discrimination against women; - Trafficking in persons; - Societal discrimination against black Tamasheqs, discrimination based on sexual orientation, societal discrimination against persons with HIV/AIDS; - Slavery-like practices and hereditary servitude relationships between ethnic groups; - Child labor. 	Resolute Mining

Figure 22. Country Risk Details (sourced from CPI, PPI, EITI and US State Department)

Country	EITI	TI Corruption Perception Index 2011	Policy Potential Index Rank 2011*	Issues Identified by the US State Department	Companies Operating in the Country
Mauritania	Candidate	2.4	n/a	<ul style="list-style-type: none"> - Mistreatment of detainees and prisoners; - Security force impunity; - Lengthy pretrial detention, harsh prison conditions; - Arbitrary arrests; - Limits on freedom of the press and assembly; - Corruption; - Discrimination against women; - Child marriage; - Political marginalization of southern-based ethnic groups, racial and ethnic discrimination; - Slavery and slavery-related practices; - Child labor. 	Gryphon Minerals
Mexico		3.0	35	<ul style="list-style-type: none"> - Unlawful killings by security forces; - Kidnappings; - Physical abuse; - Poor and overcrowded prison conditions, arbitrary arrests and detention; - Corruption; - Inefficiency, and lack of transparency that engendered impunity within the judicial system; - Confessions coerced through torture; - Violence and threats against journalists leading to self censorship; - Societal problems were domestic violence, including killings of women; - Trafficking in persons; - Social and economic discrimination against some members of the indigenous population; - Child labor. 	Intrepid Mines
Namibia		4.4	30	<ul style="list-style-type: none"> - Police use of excessive force; - Prison overcrowding and poor conditions in detention centers, arbitrary arrest, prolonged pretrial detention, and long delays in trials; - Criticism of nongovernmental organizations (NGOs); - Harassment and political intimidation of opposition members; - Official corruption. - Societal abuses included violence against women and children, including rape and child abuse; discrimination against women, ethnic minorities, and indigenous people; - Discrimination and violence based on sexual orientation and gender identity; - Child trafficking and child labor. 	Paladin Energy
Niger	Compliant	2.5	43	<ul style="list-style-type: none"> - Extrajudicial killings and use of excessive force by security forces; - Poor jail and prison conditions, arbitrary arrest and detention, prolonged pretrial detention; - Executive interference in the judiciary; - Restrictions on press freedom, forcible dispersal of demonstrators; - Restrictions on freedom of movement; - Official corruption and impunity; - Societal discrimination and violence against women; - Trafficking in persons; - Slavery; - Child labor. - During the year there were reports of sporadic acts of "banditry" on main roads and incursions by members of al-Qaida in the Lands of the Islamic Maghreb (AQIM) into Nigerian territory. 	Paladin Energy
Philippines	Has signalled intent to implement the EITI, but not a candidate yet.	2.6	66	<ul style="list-style-type: none"> - Arbitrary, unlawful, and extrajudicial killings by elements of the security services and political killings, including killings of journalists, by a variety of state and nonstate actors; - Concerns about impunity; - Members of the security services physically and psychologically abused suspects and detainees, and there were instances of torture; - Pretrial detainees and convicts were often held in overcrowded, substandard conditions; - Disappearances occurred, and arbitrary or warrantless arrests and detentions were common; - Trials were delayed, and procedures were prolonged; - Corruption was endemic; - Leftist and human rights activists reported harassment by local security forces; - Violence against women, abuse of children, child sexual exploitation, trafficking in persons; - Child labor, and ineffective enforcement of worker rights; - Separatist and terrorist groups linked to bombings that caused civilian casualties; - Kidnappings for ransom. 	OceanaGold; Medusa Mining
South Africa		4.1	67	<ul style="list-style-type: none"> - Police use of lethal and excessive force, including torture, against suspects and detainees, which resulted in deaths and injuries; - Vigilante and mob violence; - Prison overcrowding and abuse of prisoners, including beatings and rape by prison guards; - Arbitrary arrest, lengthy delays in trials and prolonged pretrial detention; - Forcible dispersal of demonstrations; - Pervasive violence against women and children; - Societal discrimination against women, persons with disabilities, and sexual orientation; - Trafficking in persons; - Violence resulting from racial and ethnic tensions and conflicts with foreigners; - Child labor, including forced child labor and child prostitution. 	Aquarius Platinum

Figure 22. Country Risk Details (sourced from CPI, PPI, EITI and US State Department)

Country	EITI	TI Corruption Perception Index 2011	Policy Potential Index Rank 2011*	Issues Identified by the US State Department	Companies Operating in the Country
Tanzania	Candidate	3.0	61	<ul style="list-style-type: none"> - Use of excessive force by military personnel, police, and prison guards as well as societal violence, which resulted in deaths and injuries; - Abuses by Sungusungu traditional citizens' anticrime units; - Harsh and life-threatening prison conditions, lengthy pretrial detention; - Judicial corruption and inefficiency, particularly in the lower courts; - Restrictions on freedoms of press and assembly; - Restrictions on the movement of refugees; - Official corruption and impunity; - Societal violence against women and persons with albinism; - Child abuse, and discrimination based on sexual orientation; - Trafficking in persons; - Child labor. 	Resolute Mining
Thailand		3.4	n/a	<ul style="list-style-type: none"> - Security forces use of excessive force against criminal suspects, and reports that police tortured, beat, and otherwise abused suspects, detainees, and prisoners, many of whom were held in overcrowded and unsanitary conditions; - There were occasional dismissals, arrests, prosecutions, and convictions of security forces in response to this behavior; however, official impunity continued to be a serious problem; - A separatist insurgency in the South resulted in numerous human rights abuses, including killings, committed by government security forces, ethnic Malay Muslim insurgents, and local defense volunteers; - The government maintained some limits on freedom of speech, the press, and assembly; - Human rights workers, particularly those focusing on violence in the South, reported harassment and intimidation; - Police corruption was widespread; - Trafficking in persons remained a concern; - Members of hill tribes without proper documentation continued to face restrictions on their movement, could not own land, and often were the targets of labor violations; - Government enforcement of labor laws was inconsistent. 	Kingsgate Consolidated; PanAust
Zimbabwe		2.2	71	<ul style="list-style-type: none"> - Intimidation and abuses against members and supporters of other political parties and obstruction of their activities; - Security forces, police continued to commit numerous, serious human rights abuses; - Dominant control and manipulation of the political process through trumped-up charges, arbitrary arrest, intimidation, and corruption effectively negated the right of citizens to change their government; - Security forces continued to torture, beat, and abuse political activists and party members, student leaders, and civil society activists with impunity. - Security forces continued to refuse to document cases of political violence against members of other political parties; - Prison conditions improved but remained harsh and life threatening; - Security forces, which regularly acted with impunity, arbitrarily arrested and detained political activists, members of civil society, labor leaders, journalists, demonstrators, and religious leaders; - Lengthy pretrial detention; - Executive influence and interference in the judiciary continued, and the government infringed on citizens' privacy rights; - The government continued to use repressive laws to suppress freedom of speech, press, assembly, association, movement and academic freedom; - High-ranking government officials made numerous public threats of violence against demonstrators and political activists; - The government continued to evict citizens and to demolish homes and informal marketplaces; - Farm invasions continued, and the government impeded nongovernmental organization (NGO) efforts to assist those displaced, as well as other vulnerable populations, albeit to a lesser degree than in 2009; - Government corruption remained widespread; - Government restrictions on domestic and international human rights NGOs; - Violence and discrimination against women, trafficking of women and children, discrimination against persons with disabilities, ethnic minorities, sexual orientation, and persons with HIV/AIDS; - Harassment and interference with labor organizations critical of government policies; - Child labor and forced labor, including by children. 	Aquarius Platinum

Source: EITI, Transparency International, Fraser Institute, US State Department, Citi Investment Research and Analysis

Previous Citi Reports

“ASX Companies: Bribery & Corruption Risk: Assessing the Approach of Potentially “At Risk” Companies”

15 March 2011, 56 pages – (For full report please click [here](#))

- **Overview** — Bribery and corruption enforcement is increasing. We identify ASX companies potentially at higher risk, based on countries of operation, industries and business models. A few companies have comprehensive B&C policies and procedures, but many ASX companies provide little explicit public information on how they are assessing and managing B&C risks.
- **Increasing Prosecution Risk** — B&C can exacerbate poverty in developing countries, create instability, distort business competition & increase project costs. Enforcement of international B&C conventions is accelerating, mainly in the US & Europe. Fines, legal costs, and related disruption can be substantial. Legislation is strongly extra-territorial, so contraventions in countries with poor rule of law can be prosecuted elsewhere. A defence under the new UK Act (that may apply to some ASX-companies) is to have adequate anti-bribery procedures in place.
- **Assessment Framework** — We identified companies potentially at higher B&C risk, based on countries of operation, higher risk industries (eg resources, construction, development) and business models (eg agents / intermediaries; partners from corrupt countries; government interactions). Our sample is mainly ASX100 companies, and smaller resource companies with developing country operations. Figure 10 to figure 34 summarise each company's public information on B&C policies and implementation against a structured framework. We welcome feedback or information we may have missed.
- **How ASX Companies Fared** — BHP & RIO demonstrate strong commitment to B&C policies and implementation. Companies that provide some detail on policy implementation are AWC, AMC, ANZ, BLD, BXB, OSH, ORI & PDN. Among larger companies at higher risk, LEI provides very little public information, but we sense this may change. Without explicit public policies it is difficult to be convinced that a company's employees and agents operate under clear B&C guidelines.
- **Transparency International's Summary** — At a March CIRA client presentation, TI concluded by saying: “Some companies are managing risks adequately. Most companies are managing risks inadequately. Transparency is a good defence.”

Figure 1. ASX Company Disclosure on Addressing Bribery & Corruption Risk

Good Information	Policy Info / Some Implementation Anecdotes	Generic Info	Mention, but Little Information	No Mention
BHP, RIO	AWC, AMC, ANZ, BLD, BXB, OSH, ORI, PDN	BLY, EQN, IPL, JHX, KCN, LLC, MML, NCM, PNA, WOR	CBA, LEI, MQG, OGC	AQP, PLA, RES, RIV

Source: Citi Investment Research and Analysis

“Human Rights & ESG Risks in Mining: Perspectives from Discussion with Oxfam”

14 October 2011, 8 pages – (For full report please click [here](#))

- **Oxfam's Mining Advocacy** — Citi hosted a client meeting with Serena Lillywhite, of Oxfam's Mining Advocacy initiative. Oxfam believes large scale private sector projects can drive economic growth and poverty reduction. However, human rights issues can pose actual and perceived risks for mining companies, particularly when operating in emerging economies where governance is weak, and the risk of corruption and conflict are high. Oxfam's general preference is for companies to remain in challenging situations and attempt to influence positive change, rather than “cutting and running”.
- **Risks to Investors** — Social and environmental problems can lead to project disruptions or even closure, license withdrawal, class actions, reputation damage and /or disinvestment by some large investors. Several examples were cited.
- **Companies and NGOs** — Large companies are increasingly working with NGOs like Oxfam, recognizing they can have good local information. It is difficult to conclusively identify “good” or “bad” companies but Oxfam cited several positive project examples, including Rio Tinto's gender impact initiatives. Oxfam has recently been involved in constructive discussions over the PNG gas pipeline project. Dialogue with smaller companies is more difficult, despite many Australian companies operating in Africa.
- **What Does Good Practice Look Like?** — Some indicators include: an appropriate local level grievance procedure; a human rights / gender impact assessment (ideally made public); and adoption of the Voluntary Principles on Security and Human Rights.
- **Revenue Transparency and Benefit Sharing** — Oxfam promotes revenue transparency, noting that many resource rich countries are mired in poverty. Unequal benefit sharing (maybe associated with corruption) can lead to community discontent and project disruption (even abandonment), posing a risk to investors. The Extractives Industry Transparency Initiative (EITI) promotes disclosure of company payments to governments by country or project. The US Frank-Dodd Bill requires disclosure. Some Australian investors are encouraging the ASX to require similar revenue disclosure.
- **Risks Posed by Use of Security Personnel** — Mining companies / projects have been associated with human rights abuses by security personnel or militia. Minor frustrations by local communities can escalate quickly into situations that result in human rights abuses. Investors might ask companies: Will you be employing security personnel? If so, have you signed up to the Voluntary Principles on Security and Human Rights (guidelines developed specifically for oil, gas and mining companies)?
- **Other Human Rights Related Issues and Risks** — These include child labour, access to land and water for food security, gender impacts and transboundary issues.

“ESG Snippets: Aquarius Platinum: Safety Review Announcement”

21 July 2011, 5 pages – (For full report please click [here](#))

- **Independent Safety Audit – CIRA & Solaris** — AQP has announced the results of an independent safety audit, commissioned by Citi Investment Research & Analysis at the instigation of Solaris Investment Management, an Australian-based shareholder in the company.
- **Background** — A catastrophic fall of ground occurred at Marikina mine in July 2010, resulting in five fatalities. Since then, AQP has researched and implemented new measures to prevent fall of ground at its underground operations.
- **Safety Audit** — The independent audit, conducted by a Canadian consultant, involved visits to AQP's operations in South Africa. The objective was to assess the new practices in the light of “world best practice”. The consultant concluded that the new ground control program in place by AQP meets and in areas exceeds industry standards (North America / Australia / World) in terms of indentifying the potential failure blocks and thereby supporting the block by “suspension loading” to arrive at “Zero Harm” conditions. He opined that: the new practices will reduce undue risk to the operator; will be effective in the future detection of geological anomalous areas; and will reduce the future incidence of catastrophic falls of ground; to arrive at a safe and cost effective mining operation achieving “zero harm”.
- **Report on AQP Website** — The Consultant's detailed report is available on AQP's website (www.aquariusplatinum.com).

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

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