

Extractive Company Values:

Attention to Environmental & Social Issues as an Indicator of Companies' Strategy Execution Potential



- **The environmental and social (E&S) issues we address in this report highlight strategic concerns for any mining or extractive company.** Tailings risk, community-company conflict, contract workers and labor disputes, and management of global reputational risk (using biodiversity impact as its proxy) create event risks such as mine failures, shutdowns or license denials. They also impact longer term operational planning because they require proactive engagement with local, global and contextual stakeholders to assure passage. We assess selected companies' corporate governance as it relates to actively managing E&S issues, identifying leaders and laggards based on relative attentiveness to material E&S concerns.
- **Detailed analysis of E&S issues provides predictive insight.** We offer a proprietary framework to assess extractive companies' underlying values, leadership, and culture based on a bottom-up analysis of material yet underappreciated environmental and social (E&S) issues. We then explain how the issues impact specific items within a company's financial statements. Four key observations:
 - Companies overall scored most positively in community conflict management and most negatively in managing global reputational risk from biodiversity impacts.
 - Antofagasta and Randgold were the only two companies ranked as leaders on their management of tailings storage facilities.
 - All else equal, an owner-operated mine is better equipped to manage its relationship with the community than one that relies heavily on contract labor; five companies, including Tullow Oil and Anglo American Platinum, scored well on this issue while Philex and Buenaventura did not.
 - Four companies, including AngloGold Ashanti and Rio Tinto, address biodiversity using our best-in-class approach.
- **Leaders** – Antofagasta, Newcrest, Randgold, Tullow Oil. **Laggards** – Buenaventura, Harmony, Philex, South32.

Authors: Sebastian Vanderzeil, Carolyn Trabuco, Michael Shavel, Emma Currier
Cornerstone Capital Global Thematic Research

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Figure 1: Companies discussed in this report

Anglo American	Anglo American Platinum	AngloGold Ashanti	Antofagasta
BHP Billiton	Cia de Minas Buenaventura	Harmony Gold Mining	Hindalco Industries
Impala Platinum	Newcrest Mining	Newmont Mining	Oil Search
Philex Mining	Randgold Resources	Rio Tinto	Sibanye Gold
Sociedad Quimica y Minera de Chile (SQM)		South32 Ltd	Tullow Oil

Source: Cornerstone Capital Group

This Research was initially commissioned by Stewart Investors. The content of the report has not been endorsed or approved by Stewart Investors, and Cornerstone Capital Group remains solely responsible for the accuracy of any information or opinions expressed herein.

Environmental and social issues facing extractive companies

Environmental and social (E&S) issues such as water, energy use and worker safety have been addressed in mining and extractive industry investment analysis for decades. The investment field recognizes that these E&S issues have near-term financial impact. However, historical analysis of quantitative E&S measures provides little insight into how individual companies might manage their specific E&S issues going forward.

Understanding how well a company will manage an E&S challenge depends, in part, on understanding a company's underlying values, its leadership and its culture

Understanding how well a company will manage an E&S challenge depends, in part, on understanding a company's underlying values, its leadership and its culture. In this report, we seek to determine the attentiveness of each company to current and emerging material E&S issues. We have chosen the word "attentive" as this analysis allows investors to better understand a company's willingness and ability to address emerging risks as it executes its strategy.

In our view, a company is better prepared to manage future E&S issues, and therefore future financial risks, if it can demonstrate the following:

- Organizational focus and incentives that encourage and support active management of material E&S issues as they arise;
- Commitment to transparency and public disclosure; and
- Willingness to engage and collaborate with local and global stakeholders.

Although investors have limited exposure to a company's values and culture, investigating how a company manifests these attributes does yield insights.

On behalf of a global asset manager, Stewart Investors, we assessed 20 extractive and mining companies spanning commodities, continents and sizes. Our purpose was to identify leaders and laggards in addressing social and environmental risks in the mining and extractive sector. The list of companies was provided to us by Stewart (Figure 2).

Figure 2: List of companies

Anglo American	Anglo American Platinum	AngloGold Ashanti	Antofagasta
BHP Billiton	Cia de Minas Buenaventura	Harmony Gold Mining	Hindalco Industries
Impala Platinum	Korea Zinc*	Newcrest Mining	Newmont Mining
Oil Search	Philex Mining	Randgold Resources	Rio Tinto
Sibanye Gold	Sociedad Quimica y Minera de Chile (SQM)	South32 Ltd	Tullow Oil

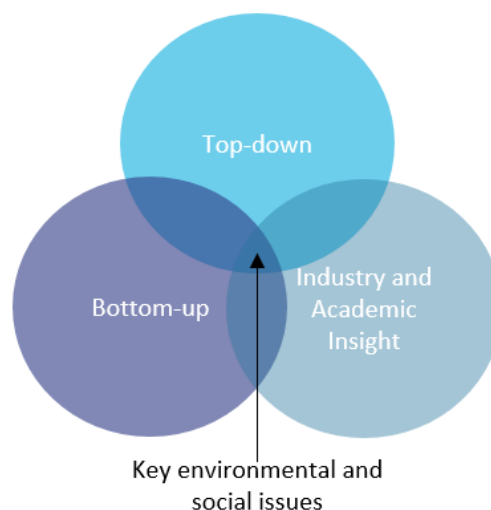
Source: Cornerstone Capital Group

* Korea Zinc was subsequently excluded from the assessment as the company provides documents only in Korean.

Detailed, bottom-up analysis allowed us to interpret how a company's approach to E&S issues was indicative of its values and culture

A traditional, top-down E&S analysis resulted in a broad list of E&S issues that provided insufficient insight into whether these issues were material and indicative of future behavior of particular companies. To gain this insight, we conducted a complementary bottom-up approach. Our detailed, company-focused analysis, along with interviews and academic studies, identified issues that were important to individual companies (Figure 3). Detailed, bottom-up analysis allowed us to interpret how a company's approach to these issues was indicative of its values and culture. We also identified issues that enabled meaningful comparability across our diverse list of companies.

Figure 3: Issues identification



Source: Cornerstone Capital Group

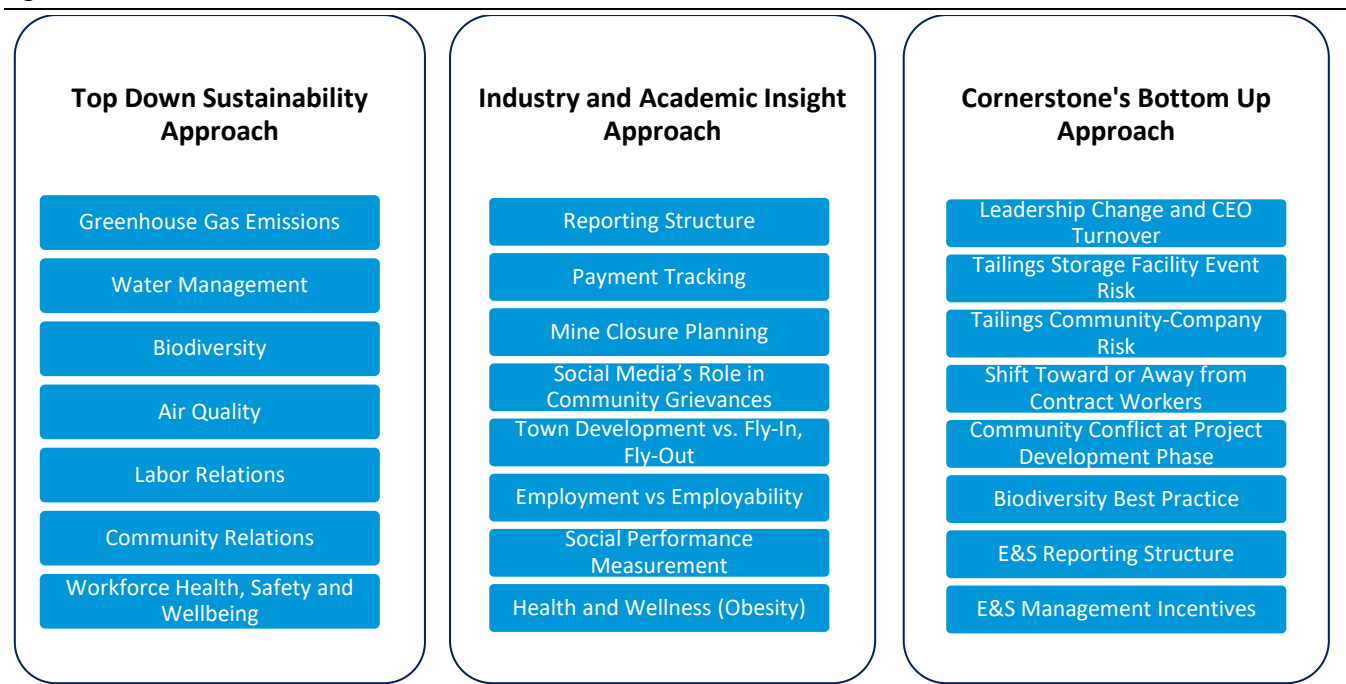
Top-down: We conducted E&S issue assessments for the entire mining/extractive industries sector. The Sustainability Accounting Standards Board (SASB) has developed a set of material E&S issues based on the collaborative efforts of an independent working group. The International Council on Mining & Metals (ICMM) also provides a survey on stakeholder perception of the most important E&S issues.

Industry and academic insight: Interviews with mining and extractive industry participants determined which E&S issues they thought would enable investors to understand the values and behaviors of particular companies. We also examined academic literature for additional context.

Bottom-up: We conducted a detailed assessment of each company's key E&S issues, using public filings, news reports and direct communication with the companies.

The full list of the E&S issues we considered is shown in Figure 4.

Figure 4: Issues list



Source: Cornerstone Capital Group

This report delves into our bottom-up focus issues and provides our rationale and analysis of each issue as it relates to these companies. We identify best practices and highlight leaders and laggards across these issues as shown in the summary table (Figure 5).

The assessment of the company's attentiveness, comprised of its E&S reporting structure and management incentives, provides investors with an understanding of how each company is likely to handle an E&S issue as it moves from pre-financial to financial. The CEO analysis is not included in the summary but important for understanding leadership in the context of E&S issues. Our issues assessment sets a red, yellow or green score for each of the companies in a specific issue:

- Red: A high-probability or high-severity risk with no company risk management and disclosure.
- Yellow: Generally a high-probability, high-severity risk with good risk management or a lower-risk issue with limited disclosure.
- Green: Either a leader in managing that issue or a lower-risk issue with appropriate disclosure.
- We have indicated where an issue is not applicable to a particular company.

Detailed tables assessing each issue are presented at the end of the report.

Figure 5: Summary table

Company	E&S Attentiveness	Tailings risk	Community-company conflict	Contract workers, labor and local stakeholders	Global reputational risk from biodiversity impact
Anglo American	Inattentive				
Anglo American Platinum	Attentive				
AngloGold Ashanti	Attentive				
Antofagasta	Attentive				
BHP	Attentive				
Buenaventura	Inattentive				
Harmony	Inattentive				
Hindalco	Inattentive	Not applicable			
Impala Platinum	Attentive				
Newcrest	Attentive				
Newmont	Inattentive				
Oil Search	Inattentive	Not applicable			
Philex	Inattentive				
Randgold	Attentive				
Rio Tinto	Attentive				
Sibanye	Inattentive				
South32	Inattentive				
SQM	Inattentive	Not applicable			
Tullow Oil	Attentive	Not applicable			

Source: Cornerstone Capital Group

Four observations from the table above:

- 1) Companies overall scored most positively in community conflict management and most negatively in managing global reputational risk from biodiversity impacts.
- 2) Antofagasta and Randgold were the only two companies ranked as leaders on their management of tailings storage facilities.
- 3) All else equal, an owner-operated mine is better equipped to manage its relationship with the community than one that relies heavily on contract labor; five companies, including Tullow Oil and Anglo American Platinum, scored well on this issue while Philex and Buenaventura did not.
- 4) Four companies, including AngloGold Ashanti and Rio Tinto, address biodiversity using our best-in-class approach.



Sebastian Vanderzeil is a Global Thematic Research Analyst with Cornerstone Capital Group. He holds an MBA from New York University's Stern School of Business. Previously, Sebastian was an economic consultant with global technical services group AECOM, where he advised on the development and finance of major infrastructure across Asia and Australia. Sebastian also worked with the Queensland State Government on water and climate issues prior to establishing Australia's first government-owned carbon broker, Ecofund Queensland.

sebastian.vanderzeil@cornerstonecapinc.com



Carolyn Trabuco is a Managing Director and Global Thematic Research Analyst at Cornerstone Capital Group. Carolyn has spent more than 25 years in the global equity investment space where she has identified dynamic secular changes, made investment decisions, developed business and industry models, valued companies, and assessed risk around global commodities, companies and industries. Previous firms include Pequot Capital, Phibro, Montgomery Securities and Fidelity Management and Research. She is an independent member of the Board of Directors of Azul Brazilian Airlines.

carolyn.trabuco@cornerstonecapinc.com



Michael Shavel is a Global Thematic Research Analyst at Cornerstone Capital Group. Prior to joining the firm, Michael was a Research Analyst on the Global Growth and Thematic team at Alliance Bernstein. He holds a B.S. in Finance from Rutgers University and is a CFA Charterholder.

michael.shavel@cornerstonecapinc.com



Emma Currier is a Research Associate at Cornerstone Capital Group. Emma graduated with a Bachelors of Arts degree in Economics from Brown University in May 2016. While at school, she worked with the Socially Responsible Investing Fund and as a teaching assistant for the Public Health and Economics departments. She spent her sophomore summer researching differences between American and Indian educational styles in Arunachal Pradesh, India, and completed a summer investment bank analyst position with Citi in the Media & Telecom group in 2015.

emma.currier@cornerstonecapinc.com

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