Investigation of Criteria used for Assurance Practices of Sustainability Reporting in Australian Listed Companies

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Executive Summary

Objective of the Study

In 2015, Victoria University through its Central Research Grant Scheme awarded an early career research grant to investigate assurance practices of sustainability reporting in Australian listed companies. The impetus for the study is the increasing disclosure by companies of their social, environmental and economic performance in the form of sustainability reports. The need for credibility of sustainability information has stimulated the development of independent assurance procedures. Assurance is fundamental to increasing user trust in sustainability reporting. The objective of this study was to investigate the assurance practices by both the auditing profession and independent assurers for non-financial information that is reported in the sustainability reports of companies listed in ASX from mining, energy and utilities. This information will prove of value to companies selecting appropriate assurance practices to verify their reports.

The research questions were:

1. What sustainability reporting practices (Sustainability Reporting, CSR Reporting, Integrated Reporting etc) were used
2. Is there an assurance process? Who provides assurance? What is the role of the auditing profession or other assurance providers?
3. What are the criteria used for assurance of non-financial information?
4. What type of verification is used to provide assurance?
5. What is the extent to which the criteria used for assurance of financial statement has been applied for sustainability measures?

Methodology

This study was conducted using a quantitative approach. The sample for the study was 200 companies selected from mining, utilities, and energy sectors companies listed in the Australian Stock Exchange (ASX). The mining sector was chosen for this study because they have been active in analysing sustainability issues due to the nature of their activities and their impact on environment. Data for this study were collected from sustainability reports, integrated reports, environmental reports and websites for 2014 from 141 mining, 51 energy and 8 utility companies. Fifty one percent of the companies in the sample were located in

Western Australia where the majority of sample companies are from the mining and energy sectors.

The analyses were conducted using descriptive statistics.

Findings of the Study

In response to the question of what types of reports were being produced. thirty three percent (66) of companies published an integrated report, Thirteen per cent (27) had a sustainability report and 10% reported their sustainability information on their websites.

Integrated reporting involves incorporating both financial and nonfinancial (environmental, social, and governance) information in a single report. Of the 27 that reported non-financial information using sustainability reports, 22 complied with GRI guidelines and one of the companies that reported environmental information also reported using GRI guidelines.

Assurance for sustainability reporting was provided by 37% of the companies. Only 3% provided assurance for sustainability information in integrated reports. The study showed that 76.9% of assurance providers were from the accounting profession. The majority of the companies who provided assurance (24) reported that responsibility in performing assurance is mainly the responsibility of the audit committees.

The most used criteria, materiality, was used in 11 of the 13 assurance reports. This was followed by accuracy (10), inclusivity (7), responsiveness (6) and consistency (6).

The level of assurance provided by a majority (62%) was limited assurance. However, 31% provided both limited and reasonable assurance.

The assurance methodology and procedures used for opinions on reasonable or limited assurance by most assurers were reported as reviews of policies and testing of a sample of selected data points, statements, systems and processes that support the information. Interviews were a major part of the methodology.

Existing criteria for audit assurance for financial statements are relevance, reliability, neutrality, understandability and completeness. However, this study found, that the criteria for sustainability reports were materiality, accuracy, inclusivity, responsiveness and consistency.

Conclusion

This study showed that companies disclosed their environmental and social information through standalone sustainability reporting, integrated reporting or through their websites.

However, the rise in integrated reporting and sustainability reporting is not equally accompanied by external assurance of the credibility of information in the reports. The majority of those companies that provided assurance employed assurance providers from the accounting profession.

Materiality was the most used criteria in this study. The materiality principle relates to determining if an issue is relevant and significant to the organization and its stakeholders. Findings also showed that the level of assurance provided was limited in the majority of assurance reports.

The results of the study suggest that accountants have a major role in future assurance of sustainability reports. At present the non-accounting assurers provide more comments on organisation processes, etc, Judging by the level of assurance currently undertaken, there is a gap in the skills of accountants in this area and in the appropriate criteria or standards that should be applied. This project makes a contribution towards filling this gap.

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Keywords: sustainability, assurance, mining and energy companies

Introduction

Sustainability is the capacity for continuance in the long-term (Zadek & Raynard, 2004). Ninety five percent of the world's largest corporations publish some form of sustainability reports (GRI, 2013). In Australia, 85% of ASX 200 companies provided some level of reporting on sustainability factors (ACSI., 2014).

In the current business environment, corporations are pressured to be accountable and transparent about their activities that can have a significant impact on the environment and society. Accompanied by investor expectation for corporate disclosures beyond what is disclosed in financial reporting, disclosures of Environmental, Social and Governance (ESG) information has attracted the attention of corporations. Investors, especially institutional investors, tend to look at longer investment horizons (Chartered Accountants of Canada, 2010) and believe that "the indicators they use to assess performance with respect to Environmental, Social and Governance issues are essential to analysis of a company's ability to sustain competitive advantage over the long term (Goldman Sachs, 2008). As a result, they are required to disclose information about their activities in relation to sustainability (Soderstrom, 2013).

The increased demand for sustainability reporting has stimulated need to establish the credibility of the information disclosed in annual reports by requiring independent assurance through auditing, verification and validation processes. This rise in the assurance of sustainability reporting has been mainly in response to business and public concerns about sustainability challenges such as global warming. Assurance is an evaluation process that uses specific principles and standards to assess the quality of an organisation's underlying systems, processes and competencies that underpin performance (Zadek & Raynard, 2004).

Prior research by Simnett, Vanstraelen, and Wai Fong (2009) reports several benefits of assurance such as reduced agency costs and greater user confidence in the accuracy and validity of information provided to investors, stakeholders, directors, and senior management. Independent assurance of sustainability reports is intended to increase the robustness, reliability, accuracy and trustworthiness of disclosed information, because high quality information is considered more trustworthy and ultimately more useful for the organization and for users of information (GRI, 2013). It is also a tool for mitigating risks associated with the potential disclosure of inaccurate or misleading information (KPMG, 2011). Accounting and environmental consulting professionals have continued to argue the importance of assurance to increase trust in assurance reporting (Fonseca, 2010).Therefore, assurance focuses on quality of data or processes to determine what data to collect, with the underlying intention to improve the quality of final disclosure (GRI, 2013; Zadek & Raynard, 2004).

Existing criteria for audit assurance for financial statements are relevance, reliability, neutrality, understandability and completeness. However, lack of unified established standards constitute a

problem for assurance of sustainability reports (Manetti & Becatti, 2009). This study aims to investigate the assurance practices of sustainability reporting in the mining sector companies in Australia.

What is Sustainability?

The word sustainability refers to the actions that companies take to reduce the negative impact of companies' operations on places, animals, human beings, oceans, waterways, land and the atmosphere. It is about maintaining a license to gain access to natural resources and ensuring that a company build long-term relationships with the shareholders, employees, contractors, communities, customers and supplier (BHP Billiton, 2014). Sustainability is the strategic focus of the business that incorporates strategies to communicate corporation activities that impact the environment and or society. The Bruntland (1987) report defines sustainable development as *"Development that meets the needs of the present without compromising the ability of future generation to meet their own needs"*.

Sustainability is also defined as the "potential for long-term well-being of the natural environment, including all biological entities as well as the interaction among nature, individuals, organisations and business strategies (Thorne, Ferrell, & Ferrell, 2011).

Emas (2015) states that the overall goal of sustainable development is the "long-term stability of the economy and environment; this is only achievable through the integration and acknowledgement of economic, environmental, and social concerns throughout the decision making process".

Today companies are considering sustainability as a more strategic and integral part of their business, whereas in the past it was for cost cutting or a reputation management. The McKinsey Global Survey 2014 report states companies are increasingly seeking to align sustainability with their overall business goals, mission or values (McKinsey & Company., 2014).

What is Sustainability Reporting?

Sustainability reporting is an integral part of the communication between the company and key stakeholders (Wallage, 2000). Soderstrom (2013) refers to sustainability reporting as the "communication which corporations make concerning their corporate social responsibility (CSR) activities, including social and environmental impacts in addition to financial performance". Sustainability reporting is defined by Global Reporting Initiative (GRI, 2011) as,

> *"Sustainability reporting is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development. 'Sustainability reporting' is a broad term considered synonymous with others used to describe reporting on economic, environmental, and social impacts (e.g., triple bottom line, corporate responsibility reporting, etc.). A sustainability report should provide a balanced and reasonable representation of the sustainability performance of a reporting organization – including both positive and negative contributions"*

Sustainability reporting is also a process that assists organizations in understanding the links between sustainability related issues and the organization's plans and strategy, goal setting, performance measurement and managing change towards a sustainable global economy"(Global Reporting Initiative, 2013). This is a process that combines the profitability of a company with the social responsibility and environmental care. Accordingly, a sustainability report should provide a balanced and reasonable representation of sustainability performance of a reporting organisation, including both positive and negative contributions (GRI, 2011). It is a more forward looking business approach which creates long-term shareholder value by embracing opportunities and managing risks derived from economic, environmental and social development.

Why is Sustainability Reporting Important?

Sustainability reports originated in the last century due to the social and political climates that prevailed during the time. Up until the 1960s non-financial information in the corporate reports focused on human resources, employee relations, commitment to provide quality products and community involvement (Nehme & Wee, 2008). However, since the late 1960s, environmental catastrophes' such as fire, which caught Cleveland's oil contaminated Cuyahoga river and the Bhopal tragedy in India, which killed over 20,000 people and left almost 600,000 people physically damaged, brought the importance of environmental disclosures to the forefront (Soderstrom, 2013). As a result, sustainability reporting is gaining prominence through communicating actions of the companies that impact society, which also enhances the quality of the relationship with internal and external stakeholders. KPMG (2008) refers to two principal factors that have driven sustainability reporting. Firstly, issues related to sustainability affect a company's long-term economic performance materially. Secondly, the business community need to respond appropriately to issues related to sustainable development.

Importance of sustainability reporting was further re-iterated by GRI (2013), stating that sustainability performance data is considered a powerful tool for assessing an organization's current health and future prospects.

Assurance of Sustainability Reporting

Growth in sustainability reporting is also accompanied by growth in external assurance statements, because third party assurance enhances the credibility of disclosed information, and user confidence. Independent assurance adds value to users of sustainability reports in two ways. a) It increases the probability of finding material errors and omissions which would improve the quality of information and assurance provided by an independent assurer; and b) it increase the credibility of information (Hodge, Subramaniam, & Stewart, 2009). Consequently, information accompanied by an assurance statement is to likely provide greater confidence to report users. Reliable and credible

information provides information to management to manage company's environmental and social risks. From the stakeholders perspective, assurance represents efforts and achievements in relation to corporate responsibility reporting (KPMG, 2002).

According to Auditing and Assurance Standards Board, assurance engagement means "an engagement in which a practitioner expresses a conclusion designed to enhance the degree of confidence of the intended users other than the responsible party about the outcome or evaluation or measurement of a subject matter against criteria" (CPA Australia, 2013).

Assurance Providers

Mock, Strohm, and Swartz (2007) reported in 2007 that assurance for sustainability reports were supplied by 35% of the big four accounting firms. Sixty five percent of sustainability reports were assured by local and national firms and consultants. Assurance was traditionally provided by the accounting profession for assurance of financial statements. However, the increased importance of reporting on environmental and social factors that impact on or are impacted by a company has resulted in growth of consultants who have experience in assurance of environmental and social activities (Hodge et al., 2009) and are competing with the accounting profession to provide assurance for sustainability reports (Wallage, 2000). They are quite often small in size and their scope tends to be narrow as their focus is confined to compliance related to environmental regulatory requirements (Owen & O'Dwyer, 2004).

However, the accounting profession is represented by high profile accounting bodies that tend to be concerned about the absence of generally accepted standards for assurance of sustainability reports (Hodge et al., 2009). Accountants have skills and competencies in performing financial audits, which can be used to audit non-financial information. A study conducted by Deegan, Cooper, and Shelly (2006b) reported that assurance statements provided by accountants do not include recommendations, praise or commentary about the organisations processes and systems, whereas consultants provide this type of additional commentary. As a result, assurances provided by consultants are more informative and provide greater clarity for users of such reports (Deegan, Cooper, & Shelly, 2006).

Assurance Practices

There are no specific guidelines to address assurance of sustainability reports in Australia. However, there are two standards for guidance of assurance engagement. The Australian Standard of Assurance Engagement (ASAE) ASAE 3000 and the International Standard of Assurance Engagement (ISAE) ISAE 3000 which cover assurance engagements other than audits or reviews of historical financial information. ISAE3000 which is the International Standard on Assurance Engagements is equivalent to the ASAE3000 which is the Australian version. This is a standard managed by

International Auditing and Assurance Board (AASB) of the International Federation of Accountants (IFAC) (ACCA, 2012).

These standards advocate two types of assurance referred to as reasonable assurance and limited assurance. The level of assurance refers to the level of risk. Reasonable assurance refers to engagements that reduce risk to a low level but ensures high level of assurance , whereas, limited assurance refers to engagements that reduce the risk to moderate levels (Marx & van Dyk, 2011). Reasonable assurance aims to report a high level of assurance, not an absolute level of assurance. This is due to limitations in the clients' internal control systems and the processes employed for assurance itself, which is provided in a positive form. In a limited assurance, the report indicates that it has not come to the attention of the practitioner, that the information is not presented fairly in accordance with the identified criteria, which is referred to as the negative form (Hodge et al., 2009). Mock et al. (2007), identified three categories of assurance statements in their study, which were classified into positive, negative and hybrid or mixed.

AA1000Assurance standard (2008) is a standard issued by AccountAbility which is a significant step towards sustainability assurance. They aim to evaluate the adherence to accountability principles of Inclusivity, Materiality and Responsiveness (ACCA, 2012).

Assurance Criteria

Criteria are required to evaluate or measure a subject matter of an assurance engagement. These are the standards or benchmarks that enable reasonably consistent evaluation or measurement of the subject matter within the context of professional judgement (Wallage, 2000). According to Auditing and Assurance Standards Board (2014, p. 15) "*suitable criteria are required for reasonably consistent measurement or evaluation of an underlying subject matter within the context of professional judgement. Without the frame of reference provided by suitable criteria, any conclusion is open to individual interpretation and misunderstanding. Suitable criteria are context-sensitive, that is, relevant to the engagement circumstances. Even for the same underlying subject matter there can be different criteria, which will yield a different measurement or evaluation*".

Currently assurance providers apply various assurance standards, but there are no generally accepted criteria that have been developed for assurance of sustainability reporting. However, ASAE 3000, A45 describes the characteristics of suitable criteria:

(a) Relevance: Relevant criteria result in subject matter information that assists decision-making by the intended users.

(b) Completeness: Criteria are complete when subject matter information prepared in accordance with them does not omit relevant factors that could reasonably be expected to affect decisions of the intended users made on the basis of that subject matter information. Complete criteria include, where relevant, benchmarks for presentation and disclosure.

(c) Reliability: Reliable criteria allow reasonably consistent measurement or evaluation of the underlying subject matter including, where relevant, presentation and disclosure, when used in similar circumstances by different assurance practitioners.

(d) Neutrality: Neutral criteria result in subject matter information that is free from bias as appropriate in the engagement circumstances.

(e) Understandability: Understandable criteria result in subject matter information that can be understood by the intended users.

(Auditing and Assurance Standards Board, 2014).

AA1000AS (2008) Assurance standard issued by Accountability refers to foundation principle of Inclusivity, which is necessary for the achievement of Materiality and Responsiveness. The three principles support the realisation of accountability. Accordingly, role of the assurance provider is to evaluate the nature and extent of an organisation's adherence to these principles based on the criteria in AA1000APS (2008) (Accountability, 2008).

Unlike for financial reporting these criteria are guidelines assessing information produced in non-financial reporting. However, companies may use various criteria as appropriate for the subject matter being assessed. A study conducted by O'Dwyer and Owen (2005) reported lack of specific criteria as a major constraint on the level of assurance provided such as a directly applicable assurance standards.

The Gap in Previous Research

Prior studies have identified that there is variability in the level of assurance as there are no standard criteria that can be applied across all sectors to provide more comparable and reliable assurance for sustainability reporting (Cooper & Owen, 2014; Fonseca, 2010; Mock et al., 2007). This study was an attempt to fill this gap by proposing a framework that could be used by the assurance providers and other interested groups such as such as auditors, accountants and standard setters.

Aims and Objectives of the Project

The overall objective of this this study is to investigate the assurance practices by both the auditing profession and independent assurers for non-financial information reported in the sustainability reports by companies specifically in Australia

Specific Aims of the Study

1. Investigate the Sustainability Reporting practices (Sustainability Reporting, CSR Reporting, Integrated Reporting, etc).
2. Determine whether there is an assurance process? Who provides assurance? The auditing profession or other assurance providers?

3. Examine the criteria used for assurance of non-financial information.
4. Determine the type of verification used to provide assurance.
5. Investigate the extent to which the criteria used for assurance of financial statements have been applied for sustainability measures.
6. Determine which standards are in general use in assurance of sustainability reports.

Methodology

According to previous research (Simnett et al., 2009) it is important for the companies which are exposed to environmental and social risks to manage these risks by purchasing assurance to increase user confidence in the credibility of the information contained in the sustainability reports they produce. As a result, this study examines the extent of sustainability reporting and the criteria used for assurance of sustainability reports.

This research was conducted in two stages. A literature survey conducted at the first stage of the project led to the development of the theoretical framework and the research design. The second stage used the secondary data collected from the annual reports and assurance reports of 200 companies listed in ASX from three different sectors: mining, production and utilities. It was designed to identify the existing assurance practices of sustainability reporting and the criteria used to measure the assurance of sustainability in Australia.

Research Method

This is a quantitative approach comprised of extracting quantitative data from the annual reports and developing a database of sustainability reporting and assurance information. In order to understand the extent of reporting the data were analysed using frequency distributions of numbers and percentages. Frequency distribution was used to quantify the extent of sustainability reporting practices, investigate the extent of compliance with GRI guidelines, determine whether there was an assurance process and identify the criteria used for assurance of non-financial information. In order to answer the research questions, the sustainability reports of 200 mining, utilities, and energy sector companies listed in the Australian Stock Exchange (ASX) were used. Data were coded to indicate types of report – Sustainability report, CSR report, integrated report, or other.

Literature Review

An extensive literature survey revealed that mining, production, and utilities are the three sectors considered to be the most relevant in analysing environmental issues due to the nature of activities and their impact on environment. According to the Department of Sustainability, Environment, Water, Population and Communities (Depatment of Sustainability Environment Water Population and Communities., 2012), environmental issues were considered to be the most relevant to

these sectors. Mining companies extract non-renewable resources, which have major environmental consequences. Companies in the utilities produce the largest amount of greenhouse gas emissions and are exposed to community concern about climate change. Companies in production are major users of energy and can produce significant amount of industrial waste products (Simnett et al., 2009). The sample for the study was selected from ASX listed companies belonging to industries having greater environmental and social impact.

A proportionate stratified random sampling technique was used to select the sample. This technique involves drawing the size of the sample from each stratum proportional to the relative size of that stratum in the target population (Daniel, 2012). Therefore, it is more representative population of the three sectors selected. Accordingly, the sample consists of 200 companies.

Secondary data were collected from sustainability reports of 200 companies in the mining, production, and utilities

Sample Selection

The sample from which secondary data were collected for the study was selected from the ASX listed companies using a proportionate stratified random sampling technique. This sample of 200 companies was selected only from three sectors: mining, production and utilities. According to the available literature, these three sectors were considered to be the most relevant in analysing environmental issues due to the nature of activities and their impact on environment. Secondary data for this study was collected from the sustainability reports for 2014.

Data Collection

The data were collected from sustainability reports, integrated reports and websites of 200 ASX listed mining, energy and utilities companies. The data were coded and compiled into a database using SPSS statistical program for analysis of quantitative data. The data coding enabled descriptive statistics to be applied to determine the characteristics of the companies, the type of report, if there is an assurance process and verification and how the defining criteria for reliability, relevance, complete, neutral and understandability was measured.

Results of the Study

Demographics of the Study

Demographics of this study are reported by location, type of operation and the type of operation by location. This helps to understand the geographical location in which the companies in the sample operate. The majority (51.5%) of companies in the mining, utilities and energy are located in Western Australia (Table 1). Investigation of the type of operation reports that majority are in the mining sector (Table 1) and type of operations and location shows that majority of the companies in the mining and

energy sector are located in Western Australia, whereas majority of the companies in the utilities are located in New South Wales (Table 3).

Table1: Location of Companies

Location	No of Companies	Percentage
West Australia	103	51.5
New South Wales	38	19.0
Victoria	24	12.0
South Australia	17	8.5
Overseas	10	5.0
Queensland	7	3.5
Tasmania	1	0.5
Total	200	100.0

Graph 1: Location of Companies

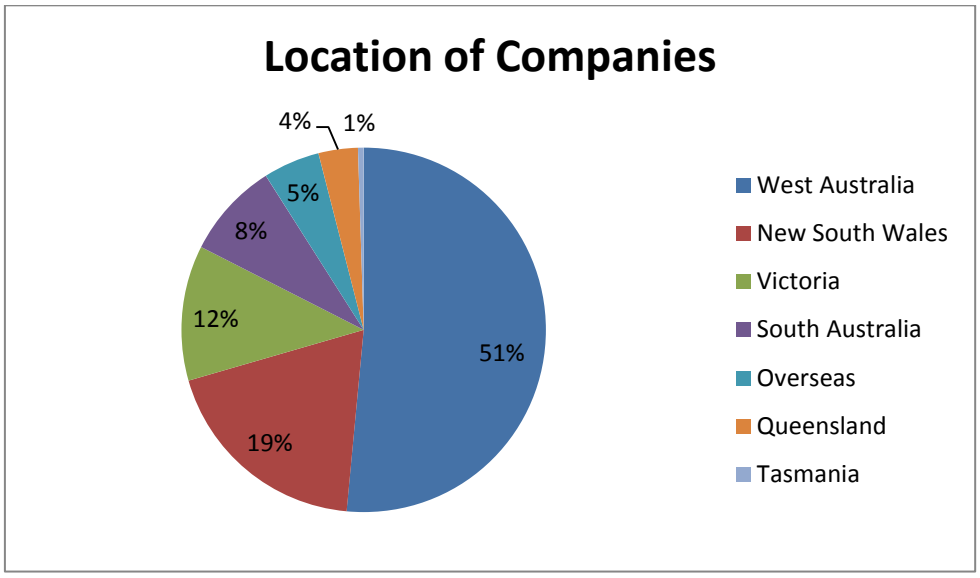


Table 2: Type of Operation

Operation	No of Companies	Percentage
Mining	141	70.5
Utility	8	4.0
Energy	51	25.5
Total	200	100.0

Graph 2: Type of Operation

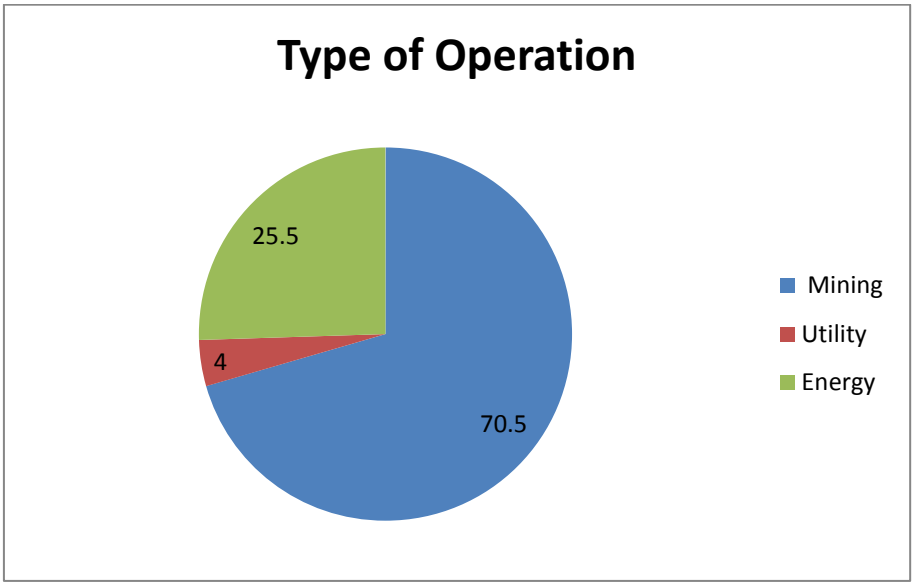


Table 3: Location of the Type of Operation

Location	Type			Total
	Mining	Utility	Energy	
West Australia	80	2	21	103
Victoria	17	1	6	24
South Australia	9	0	8	17
Queensland	6	1	0	7
New South Wales	18	4	16	38
Tasmania	1	0	0	1
Overseas	10	0	0	10
Total	141	8	51	200

Reporting

Table 4 reports the type of non-financial reporting by the companies in the sample. The majority (33%) had an integrated report, 13.5% had a sustainability report and 10% reported their sustainability information on their websites. This shows that the companies are moving towards integrated reporting. Integrated reporting involves incorporating both financial and nonfinancial (environmental, social, and governance) information in a single report (Robert G. Eccles, Kruz, & Watson, 2012) and sustainability reporting is the process of assessing and publicly disclosing social, environmental and economic performance. However, majority (58%) reported on sustainability information.

Table 4: Type of Reporting

Type of Report	No of Companies	Percentage
Integrated with Annual Report	66	33.0
Separate Sustainability Report	27	13.5
Sustainability info only on website	20	10.0
Only the policy presented	3	1.5
Only environmental info	3	1.5
No info on sustainability	81	40.5
Total	200	100.0

Table 5 reported the type of operation and type of reporting. Results show that majority of companies in all three sectors are moving towards integrated reporting. Financial, social and environmental information is integrated in a single report for stakeholders in an integrated report (Robert G Eccles & Krzus, 2010). This mode of reporting shifts corporate reporting from the traditional short term focus on financial information to long-term focus on decision-making and value creation, and the impact of non-financial information.

Table 5: Type of Operation and Reporting

Type of operation	Type of report						Total
	Separate Sustainability Report	Integrated with Annual Report	Sustainability info only on website	Only the policy presented	Only environmental info	No info on sustainability	
Mining	18(13%)	53 (37.5%)	8 (6%)	2 (1%)	2 (1%)	58 (41%)	141
Utility	2 (25%)	3 (37.5%)	2 (25%)	0	0	1 (12.5%)	8
Energy	7 (14%)	10 (20%)	10 (20%)	1 (2%)	1 (2%)	22 (43%)	51
Total	27	66	20	3	3	81	200

Acceptable measures for non-financial indicators in the sustainability reports are considered valuable and useful. Therefore, the indicators in GRI guidelines were used as indicators for measurement of information in sustainability reports. This study investigated the compliance with GRI guidelines. Only 12.5% of the companies in the total sample reported on GRI Guidelines (Table 6). However, Table 7 shows that the majority (88%) of companies with a sustainability reports, reported using GRI guidelines. GRI guidelines were developed for sustainability reports to improve the usefulness and quality of information reported by companies about their environmental, social and economic impacts and performance (Willis, 2003). The majority of the companies that complied with

the GRI guidelines had a separate sustainability report. These were in the mining sector (Table 8). This study shows that the compliance with GRI guidelines was reported mainly by those with sustainability report.

Table 6: Compliance with Sustainability Reporting Framework

Compliance with GRI	Frequency	Percent
Not Reported	175	87.5
GRI 3	11	5.5
GRI 3A+	3	1.5
GRI 3B	3	1.5
GRI 3.1C	3	1.5
GRI 4	5	2.5
Total	200	100.0

Table 7: Type of Reporting and Compliance with GRI Guidelines

Type of Report	Compliance with GRI Guidelines.						Total
	Not Reported	GRI 3	GRI 3A+	GRI 3B	GRI 3.1C	GRI 4	
Separate Sustainability Report	5	8	3	3	3	5	27
Integrated with Annual Report	64	2	0	0	0	0	66
Sustainability info only on website	20	0	0	0	0	0	20
Only the policy presented	3	0	0	0	0	0	3
Only environmental info	2	1	0	0	0	0	3
No info on sustainability	81	0	0	0	0	0	81
Total	175	11	3	3	3	5	200

Table 8: Compliance with GRI Guidelines with the Type of Operation and Reporting

Type of operation & Reporting		Compliance with GRI Guidelines						Total
		Not Reported	GRI 3	GRI 3A+	GRI 3B	GRI 3.1C	GRI 4	
Mining	Separate Sustainability Report	4	6	3	1	2	2	18
	Integrated with Annual Report	51	2	0	0	0	0	53
	Sustainability info only on website	8	0	0	0	0	0	8
	Only the policy presented	2	0	0	0	0	0	2
	Only environmental info	1	1	0	0	0	0	2
	No info on sustainability	58	0	0	0	0	0	58
	Total	124	9	3	1	2	2	141
Utility	Separate Sustainability Report	1					1	2
	Integrated with Annual Report	3					0	3
	Sustainability info only on website	2					0	2
	No info on sustainability	1					0	1
	Total	7					1	8
Energy	Separate Sustainability Report	0	2		2	1	2	7
	Integrated with Annual Report	10	0		0	0	0	10
	Sustainability info only on website	10	0		0	0	0	10
	Only the policy presented	1	0		0	0	0	1
	Only environmental info	1	0		0	0	0	1
	No info on sustainability	22	0		0	0	0	22
	Total	44	2		2	1	2	51

Table 9: Type of Operation and Compliance with Sustainability Reporting Framework

Type of Operation	Compliance: Sustainability Reporting Framework						Total
	Not Reported	GRI 3	GRI 3A+	GRI 3B	GRI 3.1C	GRI 4	
Mining	124	9	3	1	2	2	141
Utility	7	0	0	0	0	1	8
Energy	44	2	0	2	1	2	51
Total	175	11	3	3	3	5	200

This study investigated who was responsible for preparing sustainability reports. Results showed it was the responsibility of various committees in different organisations (Table 10). A third (34%) reported that it was the responsibility of the either Audit or Risk committee or both. Ten percent reported it was the responsibility of a Safety Health Environment committee. However, only 4% reported it was the responsibility of a sustainability committee.

Table 10: Parties Responsible for Preparing the Sustainability Report

Responsibility for Sustainability Reporting	Frequency	Percentage
Not Reported	92	46.0
Sustainability Committee	8	4.0
Safety Health Environment committee	21	10.5
Audit or Risk or Audit and Risk Committee	68	34.0
CSR Committee	1	.5
Director Board	4	2.0
Audit and Sustainability Committee	2	1.0
Other	4	2.0
Total	200	100.0

Assurance

External assurance helps to build trust and confidence in the intended user. This study showed that only 6.5% of the companies in the sample provided assurance for non-financial reports (Table 11). Among these, assurance for their sustainability reports was provided by 37% and integrated reports were assured by 3%. One company out of 3 who provided only environmental information, also provided assurance (Table 12). Table 13 shows assurance of sustainability reports by sector, which is 50% in the mining sector, 50% in the utilities and 43% in the energy sector.

Table 11: Assurance of Non-Financial Reports

Assurance Provided	Frequency	Percent
No	187	93.5
Yes	13	6.5
Total	200	100.0

Table 12: Assurance by Type of Report

Type of Reporting	Assurance		Total
	No	Yes	
Separate Sustainability Report	17	10 (37%)	27
Integrated with Annual Report	64	2 (3%)	66
Sustainability info only on website	20	0	20
Only the policy presented	3	0	3
Only environmental info	2	1 (33%)	3
No info on sustainability	81	0	81
Total	187	13	200

Table 13: Assurance by Sector

Sector	Assurance		Total
	No	Yes	
Mining	9	9 (50 %)	18
Utility	1	1 (50 %)	2
Energy	4	3 (43 %)	7
Total	14	13	27

Assuror's reputation enhances the credibility of the assurance statement (Jones & Solomon, 2010). This study reported that 76.9% (Table 14) of assurance providers were from the accounting profession and they were mainly from big four accounting firms.

Table 14: Type of Assurance Provider

Assurance provider	Frequency	Percent
Accounting	10	76.9
Non Accounting	3	23.1
Total	13	100.0

Table 15: Type of Report and Assurance Provider

Type of Report	Assurance provider		Total
	Accounting	Non Accounting	
Separate Sustainability Report	7	3	10
Integrated with Annual Report	2	0	2
Only environmental info	1	0	1
Total	10	3	13

Responsibility for performing the assurance was reported by 24.5% (49) of the companies (Table 16). The majority (24) identified this as the responsibility of the board of directors and audit committees. This shows that the responsibility for assurance is mainly taken by audit committees, who are also the sub-committee of the board of directors.

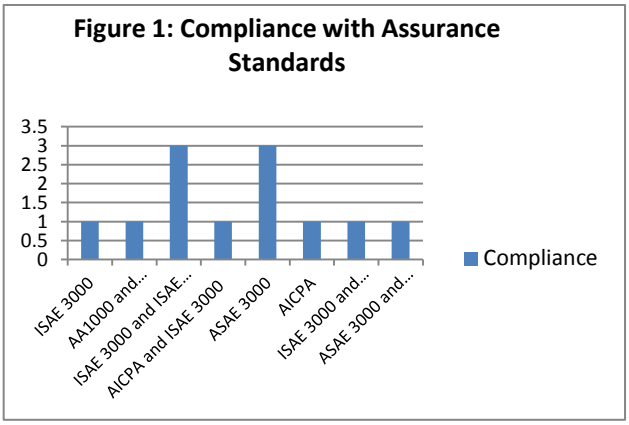
Table 16: Responsibility in Performing Assurance

Responsibility	Frequency	Percent
Not Reported	151	75.5
Director board and Sustainability committee	8	4.0
Director board and Audit committee	24	12.0
Director board and Safety Health Environment committee	11	5.5
Director board and Public Issues committee	1	.5
Managing Director	2	1.0
Director Board only	3	1.5
Total	200	100.0

Assurance standards applied by assurance providers varied from International assurance standard to Australian assurance standards. Following table shows that a majority are using Australian standards (ASAE). Few have also used the Accountability's AA100 standard. However, one assurance provider did not use a standard.

Table 17: Compliance with Assurance Standards

Assurance Standards	Compliance
ISAE 3000	1
AA1000 and ASAE3000	1
ISAE 3000 and ISAE 3410	3
AICPA and ISAE 3000	1
ASAE 3000	3
AICPA	1
ISAE 3000 and AA1000	1
ASAE 3000 and ASAE 3410	1
Total	12



Criteria

Table 18 reports the criteria used for assurance by assurance providers. The most used criteria was materiality. Accordingly Cooper and Owen (2014) states, the materiality principle relates to determining if an issue is relevant and significant to the organization and its stakeholders. It was used in 11 assurance reports, followed by accuracy (10) and inclusivity (7). Responsiveness and consistency was the next most used criteria (6) followed by relevance and timeliness. The mostly used criteria in this study were different from those recommended in the ASAE 3000 (Auditing and Assurance Standards Board, 2014Para 42-49) which are relevance, completeness, reliability, neutrality and understandability

Table 18: Criteria used for Assurance

Criteria	Frequency	Percentage
Materiality	11	5.5
Accuracy	10	5
Inclusivity	7	3.5
Responsiveness	6	3
Consistency	6	3
Relevance	5	2.5
Timeliness	5	2.5
Reliability	4	2
Completeness	2	1
Understandability	2	1
Validity	2	1
Comparability	2	1
Transparency	2	1
Clarity	1	0.5

Level of Assurance, Methodology and Procedure

The level of assurance provided was 'limited' or, 'limited' and reasonable'. In a limited assurance, the report indicates that it has not come to the attention of the practitioner that the information is not presented fairly in accordance with the identified criteria. Hodge et al. (2009) refers to this as the 'negative' form of assurance whereas, reasonable assurance is a positive report. It aims to report a 'high level' of assurance, but not absolute level of assurance. Of the 13 assurance providers, sixty two percent (8) of the assurance providers provided limited assurance and 31% (4) provided both limited and reasonable assurance (Table 19).

The assurance methodology and procedures used by assurers to give their opinions on reasonable or limited assurance was based on review of policies, interviews with key personnel, reviews of report contents for any significant omission, testing of sample of selected data and comparing year on year data (Table 20). However, for both reasonable and limited assurance most assurers used methodology and procedures that were reported as reviews of policies, risk assessments, materiality work and stakeholder engagement activities, and testing of sample of selected data points and statements and the systems and processes that support the information.

Table 19: Level of Assurance

Level of Assurance	Frequency	Percent
Not Reported	1	8.0
Limited	8	62.0
Limited or reasonable	4	31.0
Total	13	100.0

Table 20: Level of Assurance for Assurance Methodology

Assurance Methodology	Reasonable	Limited
	Frequency	Frequency
Interviews	2	7
Review of policies, risk assessments, materiality work and stakeholder engagement activities	3	10
Interviews with key personnel responsible for systems data collections and writing parts of the report - Substantiate the reliability of selected claims.	1	7
Review of report contents for any significant omission	0	7
Testing of sample of selected data points and statements and the systems and processes that support the information	3	9
Comparing year on year data	0	1

Discussion

In Australia, a majority of mining operations and the majority of the top 200 companies were located in Western Australia. This study also shows that majority of the sample of the top 200 mining were located in Western Australia. This is due to the fact that majority of mineral resources and the energy companies are located in in Western Australia.

The practice of sustainability reporting has increased since the commencement of the 21st century. This is particularly seen among listed companies, because investors expect corporate disclosures beyond what is disclosed in financial reports (ACSI., 2014). This study which investigated the top 200 companies, in 2014, also reported over 50% of the companies produce integrated reports or sustainability reports or information on their websites. Research shows the benefits received as better understanding of the relationship between financial and nonfinancial performance, improved internal measurement and control systems for producing reliable and timely nonfinancial information, lower

reputational risk, greater employee engagement, more committed customers who care about sustainability, more long-term investors who value sustainable strategies, and improved relationships with other stakeholders (Robert G. Eccles., Krzus, & Liv A. Watson., 2012).

The majority of the companies that reported non-financial information via a separate sustainability report also reported according to GRI guidelines. GRI is considered the de facto sustainability standard recognised internationally (KPMG, 2014). Separate sustainability reports were issued by 13.5% of the companies from the sample of 200 companies in this study. Over 80% of those with a sustainability report also reported according to the GRI guidelines. As in this study, KPMG's survey conducted in 2013 revealed 82% of the G250 companies that reported on sustainability reporting also referred to GRI guidelines (KPMG, 2014).

According to the ICGN guidelines on non-financial business reporting, information should be material, relevant and timely. Furthermore, non-financial reporting is linked to institutional investors' fiduciary duties. Investors require companies to disclose information related to both financial and non-financial factors, because investors need to understand information relevant to mitigation of risk facing companies. Therefore, companies report information material to investors and it is clearly linked to the company's strategic objectives (ACSI, 2010).

Based on the premise that environmental, social and governance risks have a material effect on the long-term viability of companies, disclosure of information regarding their performance in these areas, broadly referred to as sustainability risks, is integral to quality investment decision-making (ACSI, 2011). Therefore, sustainability reporting is becoming more important to investors and the credibility of the reports is important to their decision-making.

This study reported that 37% of the companies provided assurance for sustainability reports Table 12). This shows that 63% did not provide assurance for their sustainability reports. The results of the current study is supported by previous studies which reported similar results (Marx & van Dyk, 2011; Rea, 2012). However, a study conducted by GRI (2013) reported an increased level of assurance for sustainability reports since 2007. This suggests that assurance for sustainability reports are on the increase.

The companies that have a higher need to enhance credibility are more likely to choose members from the auditing profession to conduct assurance (Simnett et al., 2009). Skills and competencies of the accountants in performing financial audits can be used to perform non-financial audits. This study also showed that over 75% of the sustainability reports were assured by members of the accounting profession. Members of the accounting profession are classified as high quality assurance providers due to the fact that there are auditing standards in place for financial audits that can be applied as a guide for non-financial information.

Another finding reported by Simnett et al. (2009) that can be applied to this study is in relation to domicile of the companies. Countries that are stakeholder-orientated are more likely to choose assurance providers from auditing profession than those domiciled in shareholder orientated countries.

Even though Australia is considered a shareholder-orientated country (García-Castro, Ariño, Rodriguez, & Ayuso, 2008), companies are using the auditing profession for assurance of sustainability reports in this study.

According to the ASAE3000, criteria used to evaluate or measure the subject matter should include the following: relevance, completeness, reliability, neutrality and understandability. However, this study showed 5 of the 13 companies which provided assurance used relevance, 4 used reliability, 2 used completeness and 2 used understandability. However, materiality, accuracy, inclusivity were the top most used criteria for reporting of non-financial information. Materiality in relation to error and omissions on the subject matter was a required by the assurance practitioners in the ASAE3000, resulting in materiality being the top most used criteria by the assurance providers. AA1000AS (2008) Accountability refers to three principles, the foundation principle of Inclusivity plus Materiality and Responsiveness which is also among the most used criteria.

The level of assurance determines the depth of work the assurance provider is required to undertake. The fact that 62% of sustainability reports provided limited assurance shows that the risk is reduced to a moderate level. However, one third (31%) of the assurance providers used both limited and reasonable assurance, indicates varying levels of risks associated with different subject matters. Reasonable assurance indicates that there are limitations in the clients internal control system and the process employed for assurance itself (Hodge et al., 2009).

Conclusion

This study showed that companies are moving towards reporting their environmental and social performance through standalone sustainability reporting, integrated reporting or through their websites. However, results show that the majority of companies are moving towards integrated reporting. Even though growth in sustainability reporting is increasing, the extent of their external assurance is not impressive. The value of such reporting is not realised unless they are accompanied by an auditors' report which makes them reliable and comparable. However, lack of relevant standards applicable to the audit of non-financial reports is an issue for reliability and comparability of information in sustainability reporting.

Selection of the auditing profession for assurance of sustainability reporting by the majority of companies gave enhanced credibility to companies assuring their sustainability reports. This study also showed that a majority assurance providers were from the big 4 audit firms, further supporting the basis for enhancing credibility.

The materiality principle relates to determining if an issue is relevant and significant to the organization and its stakeholders. Accordingly paragraph 67 Framework for Assurance Engagement (Auditing and Assurance Standards Board, 2014) states "materiality is relevant when planning and performing the assurance engagement, including when determining the nature, timing and extent of

procedures, and when evaluating whether the subject matter information is free of misstatement". The study reported materiality was the most important criteria.

The study also showed the level of assurance provided is limited indicating a moderate level of risk associated to non-financial disclosures in comparison to high level of assurance provided for financial information.

Application of criteria used for non-financial information that has been recommended in ASAE3000 is a much lower scale. Whereas, Materiality, Inclusivity and responsiveness referred to in AA1000AS (2008) is in the upper scale of the criteria for non-financial information.

Evidence used to form opinions were mainly the reviews of policies, testing of samples and interviews.

Further investigations needs to be conducted through survey and interviews with providers of assurance to gain a better understanding and to ascertain criteria that can be used to design an assurance framework for sustainability reporting.

One of the main limitations of this study is the lack of co-operation by assurance providers. Even though several agreed to participate in the survey and the interviews, only one responded despite many calls and reminders. As a result, the findings of this study were limited to data collected from sustainability reports.

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Associated Papers from the Study

Heenetigala, K., De SilvaLokuwaduge, C.S., Armstrong, A., and Ediriweera, A.,(2015) An Investigation of Environmental, Social and Governance Measures of Listed Mining Sector Companies in Australia, Journal of Law and Governance 10 (4), 46 1-17

Heenetigala, K, Armstrong, A, De Silva Lokuwaduge, C.S., Ediriweera, A (2016) Book chapter on Environmental Social and Governance Reporting in CSR Sustainability and Leadership (accepted for publication)

De Silva Lokuwaduge, C.S and Heenetigala, K (2016) Exploring Environmental, Social and Governance (ESG) Reporting of Mining Sector Companies in Australia, Business Strategy and the Environment journal (accepted for publication).

Heenetigala, K, De Silva Lokuwaduge, C.S., Ediriweera, A and Armstrong, A (to be submitted) Investigation of External Assurance Practices of Sustainability Reports.

Appendix 1: Mining, Utilities and Energy sector

Company	Industry Group	Company	Industry Group
PANAUST	Mining	INDOPHIL RESOURCES	Mining
BHP BILLITON	Mining	TRITON MINERALS	Mining
NEWCREST	Mining	KINGSROSE MINING	Mining
RIO TINTO	Mining	GRANGE RESOURCES	Mining
ALCOA	Mining	MINERAL DEPOSITS	Mining
OZ MINERALS	Mining	KINGSGATE CONSOLIDATED	Mining
ANGLOGOLD ASHANTI	Mining	AVANCO RESOURCES	Mining
ILUKA RESOURCES	Mining	IRON ROAD	Mining
ALUMINA	Mining	BOUGAINVILLE COPPER	Mining
BLUSCOPE	Mining	TRIBUNE RESOURCES	Mining
SIMS METAL	Mining	MINCOR RESOURCES	Mining
FORTESCUE	Mining	WESTERN DESERT RESOURCES	Mining
ACQUILA RESOURCES	Mining	MIRABELA NICKEL	Mining
SIRIUS	Mining	BASE RESOURCES	Mining
WESTERNAREAS	Mining	INTREPID MINES	Mining
INDEPENDENCE GROUP	Mining	GOLD ROAD RESOURCES	Mining
ARRIUM	Mining	IMDEX	Mining
SANDFIRE RESOURCES	Mining	IRON ORE HOLDINGS	Mining
NORTHERN STAR	Mining	DORAY MINERALS	Mining
OCEANGOLD	Mining	TNG	Mining
REGIS	Mining	FINDERS RESOURCES	Mining
SYRAH	Mining	TIGERS REALM COAL	Mining
ZIMPLATS	Precious Metals & Minerals	SHEFFIELD RESOURCES	Mining
ALACAR	Mining	ALTONA MINING	Mining
MOUNT GIBSON	Mining	NORTON GOLD FIELDS	Mining
PAPILLON RESOURCES	Precious Metals & Minerals	ALKANE RESOURCES	Mining
EVOLUTION MINING	Mining	LAMBOO RESOURCES	Mining
ATLAS IRON	Mining	FOCUS MINERALS	Mining
BEADELL RESOURCES	Mining	RED HILL IRON	Mining
METALS X	Mining	AURELIA METALS	Mining
BC IRON	Mining	WOLLONGONG COAL	Mining
CUDECO	Mining	HILLGROVE RESOURCES	Mining
RESOLUTE MINING	Mining	ABM RESOURCES	Mining
ENDEAVOUR MINING	Mining	GINDALBIE METALS	Mining
OROCOBRE	Mining	RESOURCE AND INVESTMENT	Mining
MEDUSA MINING	Mining	STONEWALL RESOURCES	Mining
SARACEN MINERAL	Mining	ALTURA MINING	Mining
FIFTH ELEMENT	Mining	LUCAPA DIAMOND	Mining
LYNAS CORPORATION	Mining	AMEX RESOURCES	Mining
OM HOLDINGS	Mining	POSEIDON NICKEL	Mining
TIGER RESOURCES	Mining	ELEMENTAL MINERALS	Mining
PANORAMIC RESOURCES	Mining	VALENCE INDUSTRIES	Mining
TERANGA GOLD	Mining	ADITYA BIRLA MINERALS	Mining
ATRUM COAL	Mining	REX MINERALS	Mining
SUNDANCE RESOURCES	Mining	GRYPHON MINERALS	Mining
WOLF MINERALS	Mining	NORTHERN MINERALS	Mining
SILVER LAKE RESOURCES	Mining	HOT CHILI	Mining
PERSEUS MINING	Mining	ZETA RESOURCES	Mining
TROY RESOURCES	Mining	CHAMPION IRON	Mining

Company	Industry Group	Company	Industry Group
APA GROUP	Utility	EMPIRE OIL & GAS NL	Energy
AGL ENERGY LIMITED.	Utility	UNIVERSAL COAL PLC	Energy
AUSNET SERVICES	Utility	MATRIX COMPOSITES & ENGINEERING LTD	Energy
CARNEGIE WAVE ENERGY LIMITED	Utility	PURA VIDA ENERGY NL	Energy
DUET GROUP	Utility	OILEX LTD	Energy
ENEABBA GAS LIMITED	Utility	SUMMIT RESOURCES LTD	Energy
ENERGY DEVELOPMENTS LIMITED	Utility	3D RESOURCES LIMITED	Material
ENERGY WORLD CORPORATION LTD	Utility	A1 CONSOLIDATED GOLD LIMITED	Material
3D OIL LIMITED	Energy	ABM RESOURCES NL	Material
A-CAP RESOURCES LIMITED	Energy	ACCENT RESOURCES NL	Material
ABILENE OIL AND GAS LIMITED	Energy	ADMIRALTY RESOURCES NL.	Material
ACACIA COAL LIMITED	Energy	ACTIVEX LIMITED	Material
WOODSIDE PETROLEUM LIMITED	Energy	BALAMARA RESOURCES LIMITED	Material
ORIGIN ENERGY LIMITED	Energy	BARRA RESOURCES LIMITED	Material
CALTEX AUSTRALIA LIMITED	Energy	BAUXITE RESOURCES LIMITED	Material
SANTOS LIMITED	Energy	BASS METALS LTD	Material
WASHINGTON H SOUL PATTINSON &	Energy	BASSARI RESOURCES LIMITED	Material
WORLEYPARSONS LIMITED	Energy	BATHURST RESOURCES LIMITED.	Material
NEW HOPE CORPORATION LIMITED	Energy	CLASSIC MINERALS LTD	Material
WHITEHAVEN COAL LIMITED	Energy	CAENEUS MINERALS LTD	Material
BEACH ENERGY LIMITED	Energy	CANNINDAH RESOURCES LIMITED	Material
ENERGY RESOURCES OF AUSTRALIA LIMITED	Energy	CANYON RESOURCES LIMITED	Material
KAROON GAS AUSTRALIA LIMITED	Energy	CAPE LAMBERT RESOURCES LIMITED	Material
AWE LIMITED	Energy	CAPITAL MINING LIMITED	Material
PALADIN ENERGY LIMITED	Energy	DACIAN GOLD LIMITED	Material
DRILLSEARCH ENERGY LTD	Energy	DUKETON MINING LIMITED	Material
SENEX ENERGY LTD	Energy	DAMPIER GOLD LIMITED	Material
SUNDANCE ENERGY AUSTRALIA LTD	Energy	DART MINING NL	Material
SINO GAS & ENERGY HOLDINGS LTD	Energy	DATELINE RESOURCES LIMITED	Material
FAR LTD	Energy	DE GREY MINING LIMITED	Material
PENINSULA ENERGY LTD	Energy	EMMERSON RESOURCES LIMITED	Material
LONESTAR RESOURCES LTD	Energy	EASTERN IRON LIMITED	Material
TORO ENERGY LTD	Energy	ECHO RESOURCES LIMITED	Material
BURU ENERGY LTD	Energy	ELYSIUM RESOURCES LIMITED	Material
HORIZON OIL LTD	Energy	ELEMENTOS LIMITED	Material
CARNARVON PETROLEUM LTD	Energy	EMPIRE RESOURCES LIMITED	Material
STRIKE ENERGY LTD	Energy	FERTOZ LIMITED	Material
COCKATOO COAL LTD	Energy	FALCON MINERALS LIMITED	Material
WHITE ENERGY COMPANY LTD	Energy	FE LIMITED	Material
RANGE RESOURCES LTD	Energy	GENERAL MINING CORPORATION LIMITED	Material
TAP OIL LTD	Energy	GULF INDUSTRIALS LIMITED	Material
COOPER ENERGY LTD	Energy	FERRUM CRESCENT LIMITED	Material
NEPTUNE MARINE SERVICES LTD	Energy	GALAXY RESOURCES LIMITED	Material
OTTO ENERGY LTD	Energy	GASCOYNE RESOURCES LIMITED	Material
PREMIERE EASTERN ENERGY LTD	Energy	GATEWAY MINING LIMITED	Material
REY RESOURCES LTD	Energy	GBM GOLD LTD	Material
KINA PETROLEUM LTD	Energy	HAMMER METALS LIMITED	Material
BLACKGOLD INTERNATIONAL HOLDINGS LTD	Energy	HAMPTON HILL MINING NL	Material
VIMY RESOURCES LTD	Energy	HANNANS REWARD LIMITED	Material
AUSTEX OIL LTD	Energy	HAOMA MINING NL	Material
BERKELEY RESOURCES LTD	Energy	JAMESON RESOURCES LIMITED	Material
CUE ENERGY RESOURCES LTD	Energy	JERVOIS MINING LIMITED	Material
CENTRAL PETROLEUM LTD	Energy		