Sustainability Assessment: The Way Ahead for Corporate Reporting

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Abstract

The traditional single line corporate financial report does not evaluate the sustainability of a company. Triple Bottom Line (TBL) reporting has been developed so that companies can report on their impact on the three pillars of sustainability i.e. social, economic and environment. The limitations of TBL are that it is focused on the past and the short term whereas the impacts on sustainability can manifest themselves in the medium and long term i.e. 50 to 1000 years. Sustainability assessment provides a medium and long term tool that analyses not only the processes but the risk that negative impacts will occur over time. This enables a company to mitigate these risks. As business success is reliant on the effective management of risk, sustainability assessments will therefore be a useful tool that will enhance long term business sustainability to the benefit of shareholder and stakeholders of the enterprise

Keywords: Sustainability Assessment, Triple Bottom Line, Corporate Sustainability Reporting
1. **Introduction**

Corporate reporting is under increasing pressure to be expanded from the traditional single bottom line i.e. monetary profit or loss, to include social and environmental reporting of the impacts of the company's activities. The Triple Bottom Line (TBL) is a developing and increasing popular reporting methodology to focus companies on the economic, social and environmental values that they add to or subtract from the world we live in. This concept has been recently broadened to the Quadruple Bottom Line (QBL) that adds cultural and ethical values to the TBL reporting methodology. The effectiveness of this type of reporting is being tested by Sustainability Indexes such as the Dow Jones Sustainability Index that seek to measure the behaviour of corporations and the consequential effects on long term corporate sustainability.

All the above reporting is based around the short term focus of business and fits the current perception of corporate sustainability. However if long term corporate sustainability is to be achieved, companies need to undertake medium and long term Sustainability Assessments (SA) of all aspects of their operations. This paper will discuss the benefits of SA versus the current reporting methodologies and the benefits that will accrue to the companies that use SA in developing their policies and plans and in their internal reporting and external reporting.

Business management is, in essence, the art of managing risk and SA should result in the optimal management of the medium and long term risks for business, the community, the economy and the environment.

2.0 **Historical Background**

The economic adventures of the late middle ages were an early manifestation of enterprises where investors put their capital at risk. A group of investors would pool their economic resources to finance an adventure e.g. buy a ship, provision it, employ a crew and send it to say the Spice Islands (Indonesia) to trade and return with a cargo of spices to sell for profit. These adventures were usually one off relatively short term investments i.e. for one specific voyage only, and were high risk. The rewards were high (a successful voyage could mean financial security for the rest of one’s life). The proceeds of an adventure were divided at the end of the voyage and all the participants, including the crew, shared in the success or lack of success. Therefore the financial reporting required was a straight forward profit and loss calculation and the distribution of the profits to the participants was made in accordance with the pre-agreed formula.

As the longevity of a particular trade increased, there grew the need for more permanent trading posts and a more permanent administration and financial structure. So developed the large trading houses, such as Dutch East India Company 1602-1798 (1), East India Company 1600- 1858 (2), Hudson’s Bay Trading 1670-present (3) with their “corporate” structures and well defined and regular financial reporting to their investors.
The Industrial Revolution demanded more concentration of capital and the multiple ownership of enterprises grew. The 19th century saw the evolution of capital being raised through share (or stock – interchangeable terms) issues to a multiplicity of investors (shareholders/stockholders) such as the Railway Companies in the USA. These shares became tradable commodities. After many corporate failures the investing public required:

- Annual Financial Reports;
- Accounting Standards so that the reporting was consistent and comparable;
- Auditing Standards.

This coupled with the rise of Stock Exchanges to trade in the shares has led to the many reporting criteria for publicly listed companies. In most jurisdictions, companies became taxed on their profits. Therefore governments, and in particular their taxation departments, insisted on annual financial reports being filed with them. This reporting has been further complicated by the rise of transnational and truly global enterprises whose reporting is both complex and prone to manipulation for shareholder wealth considerations alone.

All these traditional financial reports focus on the economic value of the company, particularly aimed at its value to the shareholders. The reports are short term with the reporting being for the past year with comparable figures for up to the last 5 years. The future of the business is generally scoped for the next year and in some cases a broad statement of the outlook for the next 5 years. The reliability of this reporting has been put under intense scrutiny with the recent collapses of World.com and Enron in the USA where structures were developed to deceive the shareholders of the company’s true economic value (or lack of value) and there was collusion between the company and its auditors to obfuscate the true financial position of the company.

3.0 Definitions

3.1 Triple Bottom Line (TBL). The Triple Bottom Line defined by Rolltronsics, a leader in TBL reporting, as “the return on capital when evaluated and measured along with financial, social and environmental dimensions” (4). A TBL annual report will typically consist of a financial report, social responsibility report and an environmental report.

3.2 Quadruple Bottom Line (QBL). The Quadruple Bottom Line adds the dimension of culture to the other three dimensions above. This concept encapsulates all aspects of the culture of an organisation e.g. ethics, governance, etc. It has been most readily been adopted by Non Government Organisations (NGOs) and Local Governments.

3.3 Sustainable Development Reporting (SDR). This is the TBL based approach favoured by the World Business Council for Sustainable Development (WBCSD) and its New Zealand counterpart, the New Zealand Business Council for Sustainable Development (NZBCSD) and is defined as “one tool organisations can use to identify their economic, environmental and social impacts, assess their performance in these areas, make improvements and identify new
opportunities that are consistent with the goals of sustainable development” (5)

3.4 Global Reporting Initiative (GRI) This is a “long term, multi-stakeholder international process whose mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines. These Guidelines are for voluntary use by organisations for reporting on the economic, environmental, and social dimensions of their activities, products and services” (6)

3.5 Sustainable Development (SD). This was defined by the Brundtland Commission of the United Nations in 1987 (7) as “that which meets the needs of the present without compromising the ability of future generations to meet their own needs”.

3.6 Sustainability. Sustainability is achieved when “an activity can be continued or sustained indefinitely without damage to the fundamental global system of the environment and the human social condition” (8). For this paper the economic system is added to the definition although it can be argued that the economics is part of the human social condition as economics only occurs in human society.

3.7 Sustainability Assessment (SA) A Sustainability Assessment is carried out to assess whether “an activity can be continued or sustained indefinitely, without damage to the fundamental global system of the environment and the human social condition i.e. If an activity uses limited resources without recycling or replacement, damages the environment or negatively affects the human social condition or the economic system then the activity cannot be sustained.”(8)

3.8 Corporate Sustainability. Corporate Sustainability is defined in the Dow Jones Sustainability Indexes (DJSI) as “a business approach that creates long term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments. Corporate sustainability leaders achieve long-term shareholder value by gearing their strategies and managements to harness the market’s potential for sustainability products and services while at the same time successfully reducing and avoiding sustainability costs and risks”.(9)

4.0 The Development of Sustainability
In order to evaluate the benefits of Sustainability Assessments for corporate reporting, the requirements for Sustainability need to be understood. The development of the modern Sustainability movement was initiated by the publishing of Silent Spring by Rachel Carson in 1962 (10—which), which brought together research on toxicology, ecology and epidemiology to suggest that agricultural pesticide residues were building to catastrophic levels. This was linked to damage to animal species and to human health. The book’s release was a turning point in the understanding of the interconnections among the environment, the economy and social well being. (9) The intervening years between Silent Spring and the watershed Brundtland Report (ref) in 1987 was characterized by environmental NGOs focusing on the environmental aspects of sustainability and achievements were marked by international agreements such as:

The Brundtland Report “Our Common Future” 1987(7) developed its seminal definition of Sustainable Development (refer para 3.5 above). Since that time the momentum of the sustainable development movement has accelerated and there are a plethora of NGOs, international organisations, governments and business groups that are progressing the acceptance and implementation of sustainable development. Key developments for business have been:
• World Business Council for Sustainable Development (WBCSD) published Changing Courses in 1992. This established that business should be promoting sustainable development practices:
• World Trade Organisation (WTO) established in 1995. It recognised that trade, the environment and development were linked:
• Kyoto Protocol Signed in 1997. This protocol sets goals for greenhouse gas emission reduction and establishes emission trading in developed countries and the clean development mechanisms for developing countries:
• Dow Jones Sustainability Index launched in 1999. This index facilitates the investment of “ethical” funds into companies implementing sustainability principles.

(These milestones have been sourced from the Sustainable Development Time Line published by International Institute for Sustainable Development (IISD) (11))

Sustainability and sustainable development are often used interchangeably. Sustainable development is that development undertaken by a company, a local authority or government that will be sustainable i.e. if a development project will “use limited resources without recycling or replacement, damage the environment or negatively affect the human social condition or the economic system then the activity cannot be sustained”(8). The balance of this paper will focus on sustainability, which is achieved when activity over the long term will not degrade the environment, the human social condition or the economy. The three pillars of sustainability are:
• Environment;
• Social;
• Economic;
and any analysis of the sustainability of an activity, company or project must consider all of these three pillars. Sustainability is a long term concept with horizons up to 1000 years as many of the effects of activities can have at least these horizons, i.e. nuclear wastes with a half life of 10,000 years.

5.0 Limitations of Single Line Financial Reporting
As outlined above the traditional single line financial reporting systems that have progressively developed over the last 200 years are geared to providing information to the following:
• Shareholders
• Potential Investors
• Boards of Directors (Governance)
• Management
• Financial Institutions e.g. banks
• Suppliers
• Customers
• Taxation Authorities

These reports were traditionally completed annually within 2 months of the end of a trading year and were originally a simple document consisting of:
• Profit and Loss Statement which summarised the income and expenses and hence the profit or loss for the year;
• Balance Sheet that summarised the assets and liabilities and hence the equity of the shareholders.

As accounting is not an exact science and because of issues such as:
• Allocation of expenses over time – thus the profit in a particular time could be over or understated;
• Allocation between capital costs and expenses could be manipulated to maximize the profit or loss;
there were formalized a number of rules (accounting principles) on how to prepare financial statements and treat the issues such as expense allocation, what was a capital cost, etc.,. These accounting principles were typically developed and published by the Accounting Professional Institution in each country e.g. in New Zealand, it is the Society of Accountants. These were supplemented by the requirements of the Taxation Authorities whose rules covered issues such as:
• Depreciation rates for equipment — to match the write off of the costs of various types of plant and equipment with their useful life.
• Definitions of capital and operating profits

These rules are designed to ensure that companies pay equitable taxes on the profits that they make.

Since the stock market crash and the consequential Great Depression of the 1930s, the demands for transparent, accurate, timely and consistent financial reporting have increased. This has been exacerbated by the current influences of:
• The connected community — The information on share prices, yields, etc., for all the international stock market information is readily available either on line through the internet or from the stock broking industry
• The democratization of share ownership particularly in developed countries
• The large amount of funds controlled by superannuation funds.
• The recent high profile failures of companies such as Enron and World.com in the USA and HIH in Australia

The demand for timely information has resulted in pressure for companies to report quarterly and the annual reports in many cases have become marketing rather than financial reporting documents. All these influences
coupled with the increasingly short term focus of many investors, who due to the connected stock market, are able to readily take short run investment decisions that further exacerbate the short run response that companies see themselves forced into in order to attract and retain investors. The management mantra has become maximizing profits in the short term and the management rewards have been structured to reward short term success. This has generated the very large salary and bonus payments for some executives that are far in excess of what their staff can earn or the value that their contribution makes to the long term success of the company.

Therefore traditional single line accounting has had the following effects on a company:

- Narrow definition of its stakeholders
- Short term focus in its reporting, its plans and policies
- Accounting and auditing practices that in many cases can and have been manipulated for other than the stakeholders benefits

6.0 Development of “Sustainability” Reporting

As sustainability has become accepted as an issue of global importance, business has been wrestling with how to include it not only in its reporting but also in its plans and policies. However the term sustainability has shades of meaning and different levels of acceptance by companies. The introduction of Triple Bottom Line (TBL) reporting was initially fostered in New Zealand by Dick Hubbard of Hubbard Foods Ltd through his Organisation for Social Responsibility in Business. The reporting was confined to a Social Responsibility Report and Environmental Responsibility Report after the traditional Financial Reports. TBL has since developed into a well understood concept and is becoming increasingly used by New Zealand companies. It is more widely used overseas in particular Europe and North America. It recognises the three types of capital used by a company in its operation:

- Economic Capital
- Natural Capital
- Social Capital

and uses a combination of compliance issues and indicators of performance against predetermined criteria to evaluate how the company has utilised all its capitals e.g.

- Compliance with Human Rights issues such as Freedom of Association and Collective Bargaining
- Number of women in management
- Compliance with environment regulations e.g. Waste water discharge pollutant levels.
- Communication with all its stakeholders i.e. staff, community, etc., in addition to the traditional stakeholders addressed in single line reporting

TBL reports what the company has achieved in the reporting period using the chosen indicators. It assumes that the organisation is sustainable if all the indicators within each of financial, social and environmental reports are met. However as the indicators are chosen by the company, there is no confidence that all the sustainability issues have been addressed and that past
performance will translate into future performance and hence continued sustainability. A clear limitation is that the time horizons used are short term whereas sustainability has a medium and long term horizons.

The GRI Guidelines have been developed in an attempt to formalize Triple Bottom Line reporting. It is clear from the GRI Guideline document (6) that it is principally a past performance report that is:

- Voluntary
- Indicator based

and has a basic reporting time frame of the past year with limited information on future targets. Considering these limitations a TBL prepared using GRI guidelines will demonstrate a company's

- Commitment to sustainable development
- Commitment to all its stake holders
- Commitment to open and transparent communication
- Commitment to measure and report on its progress towards sustainability
- Appreciation of the short term risks in the company's operations and its interfaces with the environment and the community at large.

However as will be discussed below, due in large part to its short time frame and the lack of long term risk assessment, it does not show if they have achieved sustainability or where on the path to sustainability they currently are positioned or that the indicators they have chosen will lead to sustainability.

There are dangers that a TBL report is seen primarily as a marketing tool and companies could choose to not report on those aspects of their business that are negative with respect to sustainability and thus skew the stakeholder's perception of the company and its sustainability performance. This may be addressed in the future as the GRI Guidelines become more universally implemented and appropriate auditing procedures are in place.

### 7.0 Sustainable Assessment

Sustainability Assessment (SA) is a relatively new technique that attempts to overcome the limitations of tools such as life cycle assessment, environmental risk management, triple bottom line, quadruple bottom line and incorporates risk assessment and risk management so that medium to long term time frames are considered. "Sustainability is measured as the probability of activities being able to continue without damage to the environment or society and ensuring ongoing economic feasibility. The probability is determined by evaluating the risk of damage to the environment and society over time with full sustainability being considered to be <5% risk over 1000 years."(8). Over the last 15 – 20 years techniques have been developed to quantify sustainability, where an activity is on the path to sustainability and what they have to consider in order to achieve sustainability in the long term. Sustainability Assessment is the current step in the evolution of sustainability reporting with the development of tools such as Ecological Economics being refined to quantify what has been up to now a qualitative measure. SA draws heavily on life cycle assessment methodology and the SA steps can be summarised as

- Scoping
• Sustainability limitations
• Inventory
• Impact and risk analysis
• Assessment of Sustainability
• Mitigation Measures
• Ongoing refinement and development.

The end result should be that the probability of sustainability is assessed over a specified time. Unfortunately sustainability can only be accurately determined after the fact. Therefore SA is future oriented using risk assessment and risk management techniques.

8.0 Sustainability Assessment Reporting
There remain many interpretations of sustainable reporting for companies. Many companies do not recognise the need for any reporting other than what is currently demanded by legislation and stock exchanges, others provide a social responsibility report and increasingly others provide sustainability reports. However the multiplicity of interpretations of what constitutes sustainability reporting is illustrated by one of the world’s oldest companies, the Hudson’s Bay Company of Canada. It has been in business for more than 330 years. In 2002 it prepared its first Corporate Social Responsibility Report (12). It covered
• Environmental Issues such as:
  o Energy Conservation Programmes
  o Recycling Programmes
  o Waste Reduction Programmes.
• Social issues such as:
  o Code of Vendor Conduct
  o Community Support of Arts and Culture
  o Health & Safety
  o Education Support
  o Aboriginal Community Support (C$120,000 from a net profit of C$115 million!)
  o Employee Rights

Although stating that” we are dedicated to implementing a sustainable environment by successfully reducing our use of non-renewable natural resources in all our operations. Energy and environmental impact management are hallmarks of a progressive and sustainable organisation committed to its surroundings” (12), it is clear that it has just started on its journey to sustainability. Hudson’s Bay Company could well claim that its longevity is a hallmark of its sustainability as a company but it is unlikely that its actions over the last 330 years have contributed positively to the sustainability of the world. It is probably more correct to state that the Hudson’s Bay Company has had a sustained life and has managed the risks of being in business very well to ensure its business survival.

9.0 Drivers for Corporate Sustainability
The Dow Jones Sustainability Index (DJSI) was developed in 1999 in response to a demand from the ethical investment portfolios of institutional
investors for a measure of those companies that are adopting and implementing sustainability policies and plans. The definition of sustainability used by the DJSI is articulated in para 3.8 above. It is expanded further as ‘the quality of a company’s strategy and management and its performance in dealing with opportunities and risks deriving from economic, environmental and social developments can be quantified and used to identify and select leading companies for investment purposes. Leading sustainability companies display high levels of competence in addressing global and industry challenges in a variety of areas vis a vis:

- Strategy
- Financial
- Customers and products
- Governance and Stakeholders
- Human Resource” (9)

Companies are assessed over a number of criteria and their initial answers and the subsequent performance audits. They are rated against other companies in their industry group and a restricted number are included in the index. The results of the DJSI 2003 review have shown that the companies included in the DJSI outperformed the companies in the general index (9). This has been attributed to the fact that the companies in the DJSI have a better appreciation of the business environment, social and environmental challenges and better management and governance to assess these risks and develop plans and policies to mitigate these risks and capitalize on future opportunities. However a closer examination of the assessment criteria shows that the sustainability issues lack a medium to long term time frame and hence while the key sustainability issues of
- Climate change
- Water
- Food
- Accountability
- Health
are addressed, the time frame is short term rather than medium and long term and the risk management assessment is focused on crisis management rather than strategic risk management as well as the risk management of the impacts of the activity on the three pillars of sustainability. It is evident that the companies have addressed all the major areas of sustainability tactically if not strategically.

The index is working as evidenced by investors using it to assist in their investment decisions. It is relevant as ethical investors have a long term focus as they are investing for long term investors such as superannuation funds and this index has the potential to identify those companies that will perform well over the longer term i.e.20 years plus.

The index is also working for the companies that are part of the index. Those who are currently in the index work very hard to avoid being deleted at the annual review. Westpac is number 1 in the banking index and its commitment to sustainability as they define it is evidenced in a recent article in re:think, Waikato Management School’s October 2003 newsletter (13) in which the
CEO of Westpac, Ann Sherry, states that “they got into sustainability for three reasons:

- They saw the global shift towards sustainability
- There was a first-mover opportunity to use sustainability to differentiate the bank
- It fitted comfortably with Westpac’s existing commitment to community engagement.”

10.0 Benefits of Sustainable Assessment to Companies, Their Shareholders and Stakeholders

The Australian Government commissioned a report on Corporate Sustainability that was published late last year - The May’s report on Corporate Sustainability – an Investors Perspective (14). The key findings of which were:

- “Sustainability behaviours add value to commercial endeavour and make for good business sense.
- Sustainability is a particularly useful device for managing intangible assets such as brand and reputation… benefits include human capital management, stakeholder management and product differentiation
- The potential for capturing sustainability benefits also hinges on a successful move towards a common understanding of sustainability principles. In the absence of this, companies are not articulating their sustainability behaviour as well as they might.”

Further on the report states that” An important element in the analysis of the quality of management is the performance of the company on issues relating to sustainability. In an increasingly competitive environment, traditional strategies such as cost cutting provide at best short term advantage and simply raise the bar for all. Therefore companies are looking for more innovative and embedded ways to maintain competitive advantage. The consideration of these issues does add complexity to company analysis and management. However, in an increasingly competitive world, complexity is a given and it is the successful management of complexity which will lead to better performance. The management of sustainability issues through corporate sustainability can bring about embedded and innovative advantages which deliver:

- better risk management
- cost savings
- management of intangible assets such as brand and human capital
- extended corporate governance
- performance culture
- innovation to maintain continual improvement
- recognition and management of key stakeholders”

The above encapsulates many of the advantages of corporate sustainability but still begs the question as to the best methodology to assess this sustainability. As can be appreciated from the above analysis, TBL, as an indicator based technique, does not properly address the long term risks associated with sustainability and is at best weak sustainability and at worst pays lip service to the sustainability issues in order to fulfill a perceived corporate marketing need. The DJSI is similar but the financial drivers mean
that there is more corporate focus on sustainability and it does, in part, address risk albeit mainly in the short term.

Sustainability Assessment requires a thorough and critical analysis of all the sustainability issues i.e. social, economic and environmental systems, identifies the medium and long term impacts on these systems of the activity, determines the risk of the activity negatively affecting these systems as well as the time frame within which the damage would be likely to occur. Mitigation measures can then be designed to lower or manage these risks. It is appreciated that a sustainability assessment is a more intensive process than TBL but the benefits that accrue to the company will be all the benefits outlined in the May’s Report above with the additional benefits that:

• The future risks will be identified and quantified.
• The mitigation of these risks will be able to be more accurately determined.
• The strategic plans and policies of the company will developed with a more complete knowledge of the future business environment.
• The company will be future proofed.
• The company will fully understand the sustainability issues for its future
• The analysis will generate knowledge and hence identify opportunities that will enhance the business’s short and long term profitability
• The company will be able to demonstrate that it is a leader in corporate sustainability with the tangible and intangible benefits that this status will bring.

11.0 Conclusions
Corporate sustainability reporting has developed from a Social Responsibility Report attached to the traditional Single Bottom Line Financial Report to the Triple Bottom Line Report that addresses the three pillars of sustainability: Social, Economic and Environment. TBL has been further refined with the publishing of the GRI Guidelines into a Corporate Sustainability Report. The Dow Jones Sustainability index was developed as a rating system for companies that demonstrate a commitment to sustainability as these companies typically perform better over the long term. They are the companies that the ethical investors, who have a longer term investment horizon, wish to invest in. However, the key shortcoming in all the above reporting is that their reporting period is the past year, their planning horizon is short term and the risk analysis and management is similarly short term, typically 1 to 5 years. These are therefore at best weak sustainability.

Sustainability has horizons that are:
• Medium term 50 to 100 years
• Long term 1000 years
with sustainability defined as the risk of damage to the environment, society and the economy being <5% over 1000 years. A sustainability assessment will provide a more complete analysis of short, medium and long term risks of a business as well a more complete knowledge of the environment within which the business currently operates and will operate in the future. This
assessment, although relatively expensive in time and resources, will provide a more complete picture for management to develop plans and policies going forward that will future proof the company by:

- Ensuring access to finance
- Ensuring that innovation becomes embedded in the company
- Ensuring that the company is a market leader in all aspects of its business as it has a future oriented information system for planning and policy
- Ensuring the maximum return on
  - Economic capital
  - Social capital
  - Natural capital

Sustainability assessment is a tool to ensure strong sustainability. Business success is directly related to how risk is assessed and managed. Therefore a Sustainability Assessment of the business should result in the optimal management of the short term, medium term and long term risks for the business, the community, the economy and the environment hence maximizing the success of the enterprise for his shareholders and stakeholders.
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Additional Readings


**Note:** All the websites referenced above were visited between 28 October 2003 and 3 November 2003.