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**Measuring social, economic and
environmental sustainability at the
enterprise level: a case study of an
Australian Utility Corporation's
Sustainability Report**

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Measuring social, economic and environmental sustainability at the enterprise level: A case study of an Australian Utility Corporation's Sustainability Report

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Abstract

The debate on a sustainable future for Australia has focused enterprises on developing triple bottom line or sustainability reports. Enterprises now commonly provide reports to their stakeholders on sustainability. However it is argued in this paper that shortcomings in current reporting practices are limiting the measurement of sustainability. The Global Reporting Initiative (GRI), the most commonly applied consistent framework for enterprises, recommends the application of indicators that consider the inter-relations between the economy, society and the environment. However, these recommendations are not generally being translated into practice by firms. The environmental aspects of enterprise sustainability reports tend to be privileged over the social and economic components. Indicators of the social and economic impact of an enterprise generally draw upon productivity and human relation measurements rather than measures directly relevant to the impact of enterprise actions on the community. To illustrate these arguments we offer a case study of the Australian Gas Light Company, (AGL), 2004 Sustainability Report, and a critique of the GRI. AGL is a large Australian energy company. We argue that inter-related indicators tend not to be considered within enterprise sustainability reports. It is argued that social and economic externalities of enterprises have an impact on surrounding communities and hence should be measured and reported in conjunction with environmental factors. Moreover, these reports should be developed in a manner that enables the context of sustainability to be adequately explored.

Keywords: Sustainability; Economic; Environmental; Social; Indicators

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Introduction

In the 21st Century the measurement of sustainability has become the concern of both national governments and local communities. In these context entities as diverse as the UK Government, the United Nations, the Organisation for Economic Cooperation and Development, Sustainable Seattle and Oregon Shines have developed sustainability measurement frameworks (Veleva & Ellenbercker, 2000, p. 102). However, there has been much less development of the measurement of sustainability at the enterprise level (Tyteca cited in Veleva & Ellenbercker 2000, p. 102).

Nevertheless, enterprises are progressively developing sustainability and triple bottom line reports. Triple bottom line and sustainability reporting is a relatively new and emerging concept. It has only been adopted by a small percentage of enterprises but at an increasing rate. In 2002, among the top 250 companies of the *Global Fortune-500*, sustainability reporting increased 10% from the previous year. Moreover, 28% of the top 100 companies in 19 advanced countries issued environmental, social, or sustainability reports in 2002, an increase of 4% from the previous year (Woods 2003, p.6). Japan and UK are the leaders in the proportion of enterprises within the top 100 publicly listed companies developing these reports, at 80 and 71 per cent respectively. For Australia, only 23 per cent of companies produce these reports, considerably below the international average of 41 percent for economically advanced countries (Australian Government 2005, p.4).

In the Australian context, Allen's Consulting (2002) discuss five broad categories of sustainability reporting at the enterprise level. Enterprises that are drawn upon to provide examples of their chosen approach also include international companies with a presence in Australia. The five main categories demonstrate the varied business rationales and interpretation of community expectations for triple bottom line measurement and reporting. The categories are: *wait and see*, *packaging information for community right to know*, *stakeholder alignment*, *endorsing core principles* and *a holistic cultural perspectives*. Those in the *wait and see* category, like Fosters and the Woolworths corporation, consider it is too early to proceed with sustainability reporting without understanding more about the context and the directions for the rest of business. *Packaging information for community right*, refers to enterprises that package internal information for an external audience. These enterprises have generally made a commitment to their stakeholders to be open and transparent on sustainability issues. Examples include Wesfarmers and Orica, who are regarded as international leaders in environmental reporting. However, a change in approach to incorporate the social and economic dimensions is not yet considered by these companies to necessarily yield any additional benefits. The *stakeholder alignment* with the corporate strategy is yet another category. This approach has been undertaken by WMC. The *endorsement of principles*, sustainability principles or partnership principles, have been adopted by a few companies, namely Rio Tinto and Shell. Finally, a *holistic cultural perspectives* category, which requires defining their business purpose and their commitment to sustainability values and accountability as fully integrated. This statement indicates that their business success depends on this cultural perspective. The Body Shop and the Co-operative Bank in the United Kingdom have taken this approach (Allens Consulting 2002, p. ix-x).

These developments suggest a new era in corporate reporting and accountability. Some critics believe eventually a new global framework will govern the measurement and reporting of corporate social, environmental, and economic performance. It is thought that enterprises will eventually routinely report on key aspects that inform the overall sustainability of the enterprise and other systems that its operations impact on (Ranganathan 1998, p. 1). But to realise this vision a number of shortcomings in the current approach need to be considered.

The measurement of organisational performance is generally not situated within the larger context of sustainability that is, in terms of ecological, social or other limits or constraints. The social sustainability component of corporate sustainability reports tend to have an emphasis on internal aspects of the enterprise rather than on also considering the wider impact on society. It needs to be asked if enterprises are ready to report on their social impacts on society. Impediments such as the lack of industry benchmarks to report against, and limited research into the structure of these reports inhibit the exploration of the interdependent nature of sustainability.

Corporate sustainability frameworks have evolved within an environment in which consistent reporting formats to monitor sustainability principles at the enterprise level have been under developed. The Global Reporting Initiative (GRI) appears to be the main attempt to develop a consistent format to be applied by enterprises within their reporting regimes. The mission of the GRI is to develop and disseminate globally applicable *Sustainability Reporting Guidelines* (GRI, 2002). The GRI was developed in response to the need for a consistent, rigorous, comparable, and credible sustainable reporting framework similar to the expectations of financial reporting. GRI was launched in 1997 as a joint initiative of the US non-governmental organisation Coalition for Environmentally Responsible Economies (CERES) and the United Nations Environment Programme. This organisation, based in Amsterdam, is an independent institution, with representatives from business, accountancy, investment, environmental, human rights, research and labour organisations from around the world. GRI sees itself as an international leader in the development of sustainability indicators. Currently 168 companies report in accordance with the GRI Guidelines in shaping their sustainability reports (GRI 2002).

This paper will explore the weakness of current enterprise sustainability reporting practices through a case study of the 2004 sustainability report produced by the Australian utility corporation AGL. This report will be considered in relation to the Global Reporting Initiative (GRI), the most commonly applied sustainability monitoring system for enterprises, which has influenced the AGL reporting guidelines. AGL is considered a leader in sustainability reporting in Australia.

Overview of the Global Reporting Initiative

GRI positions itself as an external reporting framework that provides enterprises with a tool to communicate actions to improve economic; environmental and social performance; the outcomes of such actions and future strategies for improvement (GRI 2002, p. 11). These guidelines provide an option, not a requirement for organisations to draw upon. The guidelines have been developed in a flexible manner to allow companies to apply only specific aspects of the framework. However, if organisations wish to identify their reports as prepared in accordance with the 2002 GRI Guidelines their reports must meet specific conditions.

The development of the principles that underpin the reporting framework are viewed by the GRI as an integral part of the monitoring process. The GRI views principles as an important reference point to help a user interpret and assess the enterprise's decisions regarding the content of the report. Principles also should take a long term perspective. Suggested principles by the GRI are as follows (GRI 2002, p. 23):

- Form the framework for the report (transparency, inclusiveness, auditability)
- Inform decisions about what to report (completeness, relevance, sustainability context)
- Relate to ensuring quality and reliability (accuracy, neutrality, comparability)

- Inform decisions about access to the report (clarity, timeliness)

The principle of sustainability context is elaborated on within this monitoring system. In terms of the sustainability context, the reporting organisation should seek to place its performance in the larger context of ecological, social, or other limits or constraints, where such context adds significant meaning to the reported information (GRI 2002, p. 27) .

The GRI framework applies a framework that categorises sustainability indicators into economic, social and environmental performance. This structure reflects the most widely accepted approach to monitoring sustainability. GRI recognises that this categorising structure simplifies complex relationships between the economy, society and the environment. This structure may also encourage a process of considering each element in isolation rather than in an integrated manner. Nevertheless, the advocates of GRI argue that this categorisation is a starting point that is comprehensible to many and is seen as a reasonable entry point into a complex issue (GRI 2002, p. 9).

GRI indicators are segmented into two main types. The two types of indicator include core indicators and additional indicators. The GRI reporting framework also recommends that a three type indicator model should be developed, that is to say, an integrated indicator model. But as will be discussed, these indicators are not specified. Core indicators are relevant to most reporting organisations and of interest to most stakeholders (GRI 2002, p.12). Examples of some of the core indicators are, net sales, total water use, and description of equal opportunity policies or programs, as well as monitoring systems to ensure compliance and results of monitoring.

Additional indicators are considered to hold one or more of the following attributes (GRI 2002,p. 13);

- represent a leading practice in economic, environmental or social measurement
- provide information of interest to stakeholders who are particularly important to the reporting entity
- provide measures for possible consideration as a future core indicators.

If the enterprise is reporting in accordance with GRI, core indicators must be reported, and if there has been exclusion of some core indicators an explanation is required. Table 1 outlines the GRI core indicator hierarchy and the key categories and aspects captured by the indicator.

GRI has not identified a standard set of integrated performance indicators. This is because of the unique relationship of each organisation to the economic, environmental, and social systems within which it operates. Integrated measures generally fall into two categories:

1. Systemic indicators that describe the organisation's performance in relation to the limit or capacity of the system of which it is a part of (for example, the amount of air pollutants of a given type released as a proportion of the total amount allowable in a region as defined by a public authority).
2. Cross cutting indicators which directly consider two or more dimensions of economic, environmental, and social performance ratio (GRI 2002,p.45).

Table 1: GRI core indicator hierarchy structure

	Category	Aspect
Economic	Direct economic impact	Customers Suppliers Employees Providers of capital Public sector

	Category	Aspect
Environmental	Environmental	Materials Energy Water Biodiversity Emissions, effluents, and waste Suppliers Product and services Compliance Transport Overall
Social	Labour practices and decent work	Employment Labour/management relations Health and safety Training and education Diversity and opportunity
	Human rights	Strategy and management Non-discrimination Freedom of association and collective bargaining Child labour Forced and compulsory labour Disciplinary practices Security practices Indigenous rights
	Society	Community Bribery and corruption Political contributions Competition and pricing
	Product Responsibility	Customer health and safety Products and services Advertising Respect for privacy

Source: GRI 2002, p. 36

The emphasis of the core indicators appears to be on direct economic impact and there is little consideration of the flow on effects to the surrounding communities that these enterprises operate within. Indirect economic impacts are only considered as an additional indicator. Environmental key aspects appear to consider an array of varying environmental issues that the activities of the enterprise may impact on. The social core indicators key aspects generally consider direct impacts, rather than some of the flow on effects. The category of society is included, but the key aspects of the flow on effects of the enterprises operations are only minimally considered. The most relevant core indicators that address these issues are: *description of policies to manage impacts on communities in areas affected by activities*, and *description of procedures/programs to address this issue, including monitoring systems and results of monitoring*. These indicators limit the extent to which aspects of corporate activity impact on the community are considered to those that have a policy to manage the flow on effect.

Case study: AGL Sustainability Report

The Australian Gas Light Company or commonly referred to as AGL has been a participant in the Australian energy industry since 1837. This company began in New South Wales as a privately-owned gas utility. The company today is a major gas and electricity business

across Australia with a significant social, economic and ecological footprint in this country. AGL has a net profit of \$365.8 million. AGL developed its first sustainability report in 2004, which is titled *Staying Power*. The AGL Sustainability Report was developed in response to a commitment to report to stakeholders on progress in becoming a more sustainable society (AGL 2004, p. 4) and incorporates a comparison of its strategies with GRI reporting guidelines. This report is publicly available and located on the AGL website.

Overview of the sustainable development report

The main components of the report are an outline of the company; governance and management systems; a statement from the chairman and managing director; scope of the report; achievements, disappointments, and next steps; the company values and commitment to shareholders; the sustainability monitoring framework; and performance of each individual strategy; comparison of AGL's strategies with the GRI indicators; corporate survey ratings; awards; verification; and contact details. This case study will examine the sustainability monitoring system of AGL in relation to the GRI guidelines.

Overview of the sustainable development indicator framework

The structure of the AGL Sustainability reporting framework is divided up into three main components, economic; social; and environmental. The components are categories into what this framework calls strategies, instead of indicators. The framework varies slightly in its process in reporting on these three components. The social component consists of three key themes, each with its own goal. These key themes are then used to establish categories with appropriate goals and strategies. For the economic and environmental component no key themes are defined, goals with strategies for the goals to be achieved by are only outlined. Benchmarks or targets are not outlined. The main key themes, goals and chosen strategies are outlined in Table 2.

Table 2: 2005 AGL sustainability monitoring framework

Component	Theme	Goal	Strategies
Social	Our customers	Provide customers with the best service	<p>Deliver a continuous service improvement program</p> <p>Provide tailored options for our customers who are in need of specialist services and support.</p> <p>Create opportunities for customers and consumer advocates to provide input into AGL's operations, particularly in relation to sustainability issues.</p>
	Our people	Provide a safe workplace that respects and develops people and values their contributions	<p>Pursue zero injuries and incidents</p> <p>Develop and implement policies and practices that respect the rights and diversity of individuals</p> <p>Invest in our people and help them to grow and reach their potential</p> <p>Build a healthier workplace</p> <p>Build a culture that encourages and recognises outstanding contributions</p>

Component	Theme	Goal	Strategies
	Our community	Actively contribute to the community	<p>Build and maintain an effective and relevant framework to engage with the community and our employees about social issues</p> <p>Ensure the safe, reliable and efficient operation of infrastructure assets</p> <p>Consult with the community about exiting and proposed infrastructure</p>
Environmental		Excellence in environmental management and performance	<p>Quantify and understand our impact on the environment</p> <p>Improve our peoples capabilities and strengthen our environmental management system</p> <p>Improve our impact in the area of resource use, waste disposal and land quality and rehabilitation</p>
		Reduce greenhouse gas intensity of energy across the supply chain	<p>Expand our portfolio of power purchase contracts and investments in renewable and low-emission power generation</p> <p>Help customers make better choices for their home and environment</p> <p>Provide energy efficiency services to our industrial and commercial customers</p> <p>Demonstrate best practice energy management in all our corporate operations</p> <p>Minimise line losses in electricity networks and fugitive emissions from gas networks</p> <p>Work with Loy Yang Power to improve its greenhouse gas emission performance</p>
Economic		Deliver growth and consistency in cash flows to shareholders while maintaining sustainable business activities and work practices	<p>Expand the integrated energy business model</p> <p>Refocus internal supply change managements processes</p> <p>Track employee training hours and ensure that there is appropriate investment in employee training;</p> <p>Ensure that growth strategies focus on sustainable cash flows</p> <p>Report the financial contribution made to the community</p> <p>Remuneration to attract and retain best employees</p>

The key themes that emerge from the strategies are; service delivery, safe workforce, contribute to community, environmental management and performance, reduce

greenhouse gases, and shareholders returns. These key themes will be analysed later within this review.

Review of the indicator framework

Like many sustainability reporting frameworks, the structure of the AGL Sustainability report segments measurements into the following categories, social, economic and environmental. This framework does not situate itself to consider the complex relationships embedded within sustainability. The structure of the report leaves little scope for considering the inter-relations between indicators categorised into economic, social and environmental performance. No integrated indicators have been included within the AGL sustainability report. However, the GRI recommends that integrated indicators should be included to capture the complexities of sustainability. The inter-relations between the indicators in terms of either complementary or potential conflicts are not discussed within the report. Moreover, no discussion occurs that considers the social, economic, and environmental formation and depletion of the organisation at the local, economic and environmental level, or even how to consider the inter-relations between these concepts.

The key themes encompass the following items: *service delivery; safe workforce; contribute to community; environmental management and performance; reduce greenhouse gases, and shareholders returns*. A review of the key themes that are present within this indicator framework reveals that the economic sustainability of the enterprise appears to be at the forefront of concerns albeit social sustainability is positioned as important for business success. All the key themes have a correlation towards an economic emphasis, with few exceptions. One of these exceptions is a discussion of the need to reduce greenhouse gases, which has environmental and community salience. The theme environmental management and performance, which seemingly does have an environmental focus, is actually intertwined with an efficiency component. While environmental management is a wider issue than eco-efficiency, the latter is a strong component of the theme. Eco-efficiency integrates environmental concerns into business practices, where both economic and environmental benefits are expected results. Efficiency and environmental protection are seen to synergistically beneficial. It is thought that eco-efficiency helps to gain a competitive advantage in the market place as environmental stewardship is viewed as good business sense (Clapp & Dauvergne 2005, p. 177). The theme *invest in our community* emphasis is however unclear. These items could be considered to be evidence of a genuine concern for the environment and the community. AGL might also be seeking to ensure it has a licence to continue operation. The latter clearly has an emphasis on the economic dimension.

GRI and the AGL sustainability report

The GRI describes the role of the economic indicators as conveying how the organisation affects its stakeholders who directly or indirectly have some form of economic interaction with the organisation. The GRI forwards two types of economic indicators, direct and indirect. Direct economic indicators include indicators that measure the monetary flows between the organisation and its key stakeholders, and secondly how the organisation affects the economic circumstances of those stakeholders. Indirect indicators consider the externalities that the organisation creates on its communities. The AGL economic indicators appear to generally emphasis direct indicators that measure the monetary flows between the organisation and its key stakeholders. The three indicators that in particular fall into this category are 1. expand the integrated energy business model, 2. refocus internal supply change management processes and 3. ensure that growth strategies focus on sustainable cash flows. Other economic indicators within the AGL report included

issues about employee relations, including employee training and remuneration. These indicators consider issues that affect the productivity of the organisation. The final indicator included in this suite is to report the financial contribution made to the community, which could also be seen as an indirect indicator. This is because this investment into the community is seen as a positive externality to the community.

Environmental indicators consider the impact of the organisation on the environment. The emphasis of AGL's environmental indicators is on greenhouse gas emissions. The GRI framework suggests that organisations should provide both absolute and normalised measures (e.g. resources per output) to enable an understanding to be developed on the scale or magnitude of the use or impact, and provide a sense of the organisations efficiency and comparison between organisations of different sizes. The AGL indicators generally only report in absolute figures. An environmental footprint is included, however it is not compared to an industry benchmark or another relevant benchmark. This therefore makes it difficult to understand the scale or magnitude of the environmental impact. Intensity of emission are measured against a state average, but this appears to be one of the few indicators that provides such a comparison. The environmental footprint measures the land required to support any human activity. In this case the footprint estimates the land required to support the enterprises' activity. The inclusion of this tool helps to provide an understanding of the enterprises' overall impact on the environment. No such equivalent measures have been applied with the social and economic components.

Social performance indicators focus on the impact of an organisation on the social system within which it operates. The GRI acknowledges that not all social impacts are captured by the framework, and their measures do not enjoy the consensus of environmental indicators. The GRI key themes are; labour practices, human rights, and the broader issues affecting consumers, community and other stakeholders in society. The key themes of the AGL's social indicators are around their customers, people and community. AGL's goals under these themes consider customer service; safety of the work place; development of its employees and recognising their contribution, and contributing to the community.

The impact on the community from AGL's operation and the services offered is not directly monitored. Reporting focuses on the following three themes in the social dimension: 1. customer service; 2. the workplace; and 3. engage, consult and ensure operations are safe, efficient and reliable. In contrast to the GRI the AGL framework does not have an emphasis on the broader issues affecting the community and its stakeholders. However, the GRI is also limited in considering the organisational impacts on the social system it operates within.

In summary, the majority of the indicators included in the AGL sustainability reporting framework have an economic emphasis. Many of these indicators could be referred to as productivity performance measures for the enterprise. The AGL indicators generally only report in absolute figures. This therefore makes it difficult to understand the scale or magnitude of, for example, the environmental impact of the enterprise. An environmental footprint is included, however, it is not compared to an industry benchmark or another relevant benchmarks. Albeit its inclusion might be considered as an attempt to provide an indication of the enterprises' impact on the environment. In fairness to AGL a short coming of reporting is the lack of industry benchmarks that can be drawn upon (Allens Consulting, 2002, p. xx). The social component of the AGL framework does not measure the impact on the community from AGL's operation and the service that they offer is not directly monitored in terms of the positive and negative impacts on the community of this organisation.

Moreover, a better understanding of the issues affecting the community and its stakeholders would strengthen the indicator framework. Moreover for economic indicators, an understanding of the issues and their impacts affecting the community and its

stakeholders, beyond shareholders, would strengthen this framework's ability to monitor sustainability.

AGL does not appear to place its performance in the larger context of sustainability, that is, in terms of ecological, social or other limits or constraints. The framework does not appear to encompass indicators that provide an insight into the overall impact of the organisation, both positive and negative, from a sustainability perspective. The exception to this is the environmental footprint, which while not an indicator is included in the report. Nevertheless, the environmental footprint only provides an absolute figure, which leaves unanswered the organisation's total impact on the environment and the community. Moreover, the AGL sustainability framework does not offer indicators that can be used to obtain a holistic or integrated overview of the impact of the company's activities.

Clearly, the approach taken by AGL and other companies using similar frameworks could be improved by the inclusion of integrated indicators, and indicators to monitor enterprise's impact on interdependent social and economic systems.

As previously explained integrated indicators include either a systematic or cross cutting indicator. A systematic indicator considers the organisation's performance in relation to the limit or capacity of the system of which it is a part of. For example, an integrated indicator might be one which measured the amount of greenhouse gases released as a proportion of the total sector. Cross cutting indicators directly consider two or more dimensions of economic, environmental, and social performance ratio might include developing appropriate indicators on resource efficiency and sustainable use of natural assets (intensity of use of water and trends in intensity of use of natural resource against increase in net profit); economic value added per environmental footprint; material efficiency; and changing production and consumption patterns (share of eco-labelled products).

In considering the enterprise's impact on the social and economic systems consideration needs to be particular given to the impact of the enterprise's operations on the community in which it operate and as well the enterprise impact at a regional and/or national level. Indicators such as these might include ones that monitor the enterprise's impact within the community it operates: any pressures placed on the assets and infrastructure within the community that are required to ensure residents can maintain a productive life i.e. quality of roads, electricity supply. Indicators that monitor community capital might include reporting on issues like aesthetics, noise and odour levels, social pathologies, security, and economic welfare. In monitoring the enterprise impact at a regional and/or national level the contribution of the overall output, value added and employment to the region could be reported, as well as contributions from the enterprise through their operational activities to improvements to the environment for a community at the regional or national level should be monitored. For some products and services it is also important to consider the social impact of the product, for example, electricity, an essential service. Within the developed world electricity plays an important part in ensuring basic human needs are met.

Improving the framework

Our analysis of the approach taken by the AGL sustainability report suggests some scrutiny should be brought to bear on its source of inspiration, the GRI.

As the most commonly applied guidelines to enterprise sustainability monitoring systems the GRI framework should bear some scrutiny. The GRI framework does not provide guidance on what are considered areas of priority in considering the social and economic external impacts on society. As illustrated in Table 1 the core indicators only consider direct economic impacts, and not indirect impacts, such as the economic impact of the enterprise operating in the community, or reductions in employment at the enterprise that impact on

the community it operates within. External impacts might include equity, community benefit/employment, community cohesion, stakeholder participation, and capacity development. Internal impacts include employee health and safety (Labuschagne et al. 2003).

The GRI does not provide this information, even though its guidelines list the indicators of community involvement and skills transfer, no guidance is given of how to collect or how to evaluate these results. The GRI framework itself lists over 100 indicators. No form of guidance is given on how to select the most appropriate indicators, or what mix of indicators is required to be able to accurately report on sustainability (Veleva & Ellenbecker 2001, p. 112).

The GRI conceptual framework tends to simplify complex issues into narrow categories (social, economic, environmental) when these issues might be considered in a more integrated manner (GRI 2002, p.11). Limiting performance measurement to these categories may not capture the impact of an organisation within the context of sustainability for the following reasons:

- changes in one aspect of economic, environmental, or social performance often result in changes to other aspects of sustainability;
- sustainability strategies often use one area of sustainability as a reference point when defining goals for another area; and
- advancing sustainable development requires coordinated movement across a set of performance measurements, rather than random improvement within full range of measurements.

The GRI recommends that integrated performance measures are applied (GRI 2002, p. 45). However, due to their nature GRI does not specify indicators for inclusion. This may result in an enterprise influenced by these guidelines not including integrated components into their monitoring system, as seems to be the case in the AGL sustainability report. Moreover, the GRI appears to give little guidance on how to develop these types of indicators.

A further issue concerns the GRI indicator hierarchy structure (Table 1), which identifies key aspects to be reported as part of a sustainability monitoring system. These key aspects appear to reflect as Norman and MacDonald (2003, p. 5) suggest, data that is gathered by the standard departments within any large organisation. Human resource departments typically collect and maintain records on employee turnover, employee-demographic information by gender and/or ethnicity, measures of employee satisfaction, customer satisfaction, and relationships with suppliers. This data has an emphasis on conventional and productivity performance, and its initial purpose is not to monitor sustainability.

Some lessons and areas for further research

From a sustainability perspective, the reporting of the external impacts on the social system from the enterprise is clearly important. However, our analysis and the literature in this area suggests that even exemplar enterprises have not recognised the paradigm shift required for this type of reporting. Reporting on social sustainability requires a corporation to acknowledge the social impact of the enterprise on society and to help to understand and take account of the consequences of doing business on the social well-being of communities affected by that enterprise (Murray et al. 2006, p. 6). In this context, survey results from the South African process industry indicate that '... the paradigm shift of businesses taking responsibility for their social impacts upon external communities have not yet taken place' (Labuschagne et al. 2003, p. 379). . Community capital was

considered not relevant by more than 30 per cent of participants (Labuschagne et al. 2003, p. 379). Community capital is described by Labuschagne et al. (2003 p. 379) as '... the effect of an operational initiative on the social and institutional relationships and networks of trust, reciprocity, and support as well as the typical characteristics of the community. Community capital studies consider the impact of the enterprise on the community of aesthetics, noise and odour levels; cultural properties; social pathologies (induced or increased); security (induced or increased crime); economic welfare (induced business opportunities, the impact on poverty and social cohesion.

Many aspects of social sustainability are difficult to measure. Little research has been undertaken on how to monitor company-community partnerships, investment in local community, job creation and quality of life, all examples of corporate impact which are difficult to measure and evaluate (Veleva & Ellenbecker 2001, p. 104). Many of these items may not be quantifiable and may have an element of subjectivity (Veleva & Ellenbecker 2001, p. 106). Further research is required into how to develop methods to collect and report this data on these issues.

Conclusion

Enterprises are increasingly providing reports to stakeholders and the general public on the sustainability of their organisation. As this paper illustrates, the environmental aspects of these reports tend to be privileged over the social and economic components. Monitoring generally under-considers the social and economic impact on the community resulting from the enterprise. The social and economic components generally draw upon productivity and human relation measurements rather than reporting on these factors in relation to the sustainability of the enterprise. Further research is required into reporting mechanisms for social and economic externalities, such job losses and other externalities that arise from unsustainable social and economic practices by enterprises. These externalities have an impact on surrounding communities and are capable of being measured and reported in conjunction with environmental factors. Moreover, the structure of these reporting systems needs to be further developed to allow them to better consider the issues of sustainability. The inclusion of measures that allow consideration of the inter-relationships between sustainability indicators would also strengthen frameworks to monitor sustainability at the enterprise level.

References

- AGL (2004) *staying power: Sustainability Report 2004*. www.agl.com.au
- AGL (2005) *staying power: Sustainability Report 2005*. www.agl.com.au
- Allen Consulting, (2002), *Triple bottom line Measurement and Reporting in Australia*, prepared for the Commonwealth Government of Australia, Canberra.
- Australian Government, (2005) *The State of Sustainability Reporting in Australia 2005*, Commonwealth Government of Australia, Canberra.
- Briassoulis, H. (2001) 'Sustainable development and its indicators: Through a (planner's) glass darkly', *Journal of Environmental Planning and Management*, Vol. 44(3), pp409-427.
- Clapp, J., and Dauvergne, P. (2005) *Paths to a Green World*, The MIT Press, London.

- Dawkins, J. and Lewis, S. (2002), 'Is Industry Socially Responsible?' *Market & Opinion Research International*, 25 Nov 2002.
- GRI, (2002) *Sustainability Reporting Guidelines*, www.globalreporting.org.
- Keeble, J., Topiol, S., and Berkeley, S. (2003) 'Using indicators to measure sustainability performance at a corporate and project level', *Journal of Business Ethics*, Vol. 44, pp149-158.
- Norman, W. and MacDonald, C. (2003) 'Getting to the Bottom of "Triple Bottom Line"', *In Press, Business Ethics Quarterly*, March 2003.
- White, A. (1999), 'Sustainability and the Accountable Corporation', *Environment*, October 1999, Vol.41, p30.
- Woods, M. (2003), 'The global reporting initiative', *The CPA Journal*, June 23, Vol. 73(6), pp60-66.
- Veleva, V. and Ellenbecker, M. (2000), 'A proposal for measuring business sustainability', *GMI*, Autumn 2000, pp101-120.