

From soothing palliatives and towards ecological literacy:

A critique of the Triple Bottom Line

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Abstract

The ‘triple bottom line’ (3BL), an idea attributed to and increasingly evangelized by John Elkington of the London-based consultancy, SustainAbility (Elkington, 1997; Wheeler & Elkington 2001), involves incorporating economic, environmental and social performance indicators into businesses’ management, measurement and reporting processes. The emergence and increasing take-up by business of the 3BL, however, seems to have created dangerous uncertainty as to what is required of organizations. At its narrowest, pursuing the 3BL involves measuring and reporting economic, environmental and social performance objectives that are pursued simultaneously. A broader view, however, suggests that the 3BL involves assessing an entity’s values, strategies and practices and how these can be utilized to achieve economic, environmental and social objectives (SustainAbility, 2003). The term also seems to be used increasingly as a synonym for “sustainability”. Many organizations seem to confuse narrow and often incomplete reporting practices with claims to be *reporting on being sustainable*, actually *being sustainable*, or more commonly, with claims to be *moving towards sustainability*. In view of such dangerous confusion, this paper critically examines the content of international business 3BL reporting and argues that while pursuing the 3BL may be a necessary condition for sustainability, it is unlikely to be a sufficient condition, and indeed may amount to little more than soothing palliatives, leading to greater levels of *un-sustainability*. We offer, therefore, some ways in which businesses may begin to get beyond their 3BL change-but-no-change rhetoric of sustainability and towards ecological literacy.

1. Introduction

As part of a growing debate about what and how business leaders, managers and decision makers can genuinely contribute to a transition to an ecologically sustainable society (Milbrath, 1984), this paper examines international business, and its associations, in promoting sustainable development. Our analysis is based on a critical evaluation of what such organisations have to “say” about sustainable development, mostly through their annual reports and other documents. Our focus is the so-called ‘triple bottom line’ (3BL) and we question the idea and its practice in a transition towards a sustainable society. The 3BL is gaining in popularity in businesses’ management, measurement and reporting processes; a trend encouraged by a range of statutory and discretionary measures and guidelines. How far the claims of its proponents are borne out as business attempts to take up a sustainability agenda using the 3BL is unclear. Such claims, which draw on a business case for 3BL reporting, border at times on the evangelical, for example:

It is becoming clear that communicating effectively with stakeholders on progress towards economic prosperity, environmental quality and social justice i.e. the triple bottom line, will become a defining characteristic of corporate responsibility in the 21st century (*Elkington, J. 1998. Cannibals with Forks: The Triple Bottom Line of 21st Century Business....*) (Wheeler & Elkington, 2001, p.1)

One thing is for certain. In the world of cybernetic reporting and communication of environmental, social and economic information, the triple bottom line will come alive as never before, and it will do so not for moral or accountability reasons, important though these are. The triple bottom line will become vibrantly interactive because it adds real value for stakeholders and assists companies in successfully navigating their marketplaces. (Wheeler & Elkington, 2001, p.13)

Given the increasing take up of the 3BL and in particular its increasing use as a synonym for “sustainability” we believe it is timely to examine the use of the 3BL in practice. The analysis shows that while such organisations talk about themselves in terms that are new and different, much that is conveyed about underlying assumptions, beliefs and values remains little different from business-as-usual. We recognise that taking up 3BL reporting may be an important first step for many business organisations looking to engage with an agenda for sustainability, but we argue that the 3BL is unlikely to be a sufficient condition for sustainability, and indeed may lead to greater levels of *un*-sustainability. In order to contribute in a (more) constructive manner to the growing discourse of business and sustainability, we offer alternative ways in which businesses may begin to get beyond their 3BL change-but-no-change rhetoric of sustainability in arguing for alternative processes grounded in organizational ecological literacy.

The paper is structured as follows. Section two sets out what we have come to understand by the term ‘sustainability’. Section three sets out how business has made a certain (change-but-no-change) sense of sustainability by over-viewing the work others and we have done in critically appraising 3BL reporting. Section four turns to the role of business associations and institutions in reinforcing the business case for sustainable development through reporting. Section five explores issues, ideas, and questions about organisational life that we believe must urgently inform corporate agendas and the syllabi of business schools over the next decade or so if we are to get beyond the cognitively comforting, self-deluding soothing palliatives that are currently being offered as solutions. A final section puts forward concluding comments.

2. Sustainability: Earth's Future, Our Future – Survivalists versus Prometheans

The paper is motivated by our deep concern that businesses' attempts to take up an agenda for sustainability are more likely to move us away from than towards an ecologically viable future. In order to justify our own agenda for radical change in organisational life, and in the way businesses measure and communicate their 'sustainability' performance, we first briefly review some of the literature on environment and development, and present our understanding of sustainability. As a starting point, we draw on Dryzek's (1997) taxonomy of environmental discourses.

As Dryzek (1997, pp. 23-60) notes, history, ever since Malthus (1798) and Jevons (1865), reveals a series of false predictions about resource exhaustion and whether the end of the world is nigh¹. He suggests, on one side of the argument stand the 'survivalists' and on the other the 'Prometheans.'²

The survivalist world consists of finite ecosystems with fixed stocks of resources, where human population explosion and economic growth threaten to overshoot the limits of these systems. In the Promethean world, nature does not exist, save as a source of matter to be rearranged in the human interest through the application of energy and technology...Where Prometheans see benign trends heading off into a happy future, survivalists see looming boundaries into which these trends will eventually crash. (Dryzek, 1997, p. 59).

Modern day survivalists continue to chart changes to environmental conditions, the damage human and industrial processes are causing the environment, and how such damage may ultimately undermine the basis for our survival (e.g., Worldwatch Institute's (2003) *Vital Signs* and *State of the World* Reports; UNEP's *Global Environmental Outlook (GEO)* Reports; World Wide Fund's *Living Planet Report* (2002)).³ While some of this literature is content to document trends, some of it makes bold predictions. The UNEP GEO-2000 report, for example, suggests:

Global emissions of CO₂ reached a new high of nearly 23 900 million tonnes in 1996 - nearly four times the 1950 total. Without the Montreal Protocol, levels of ozone-depleting substances would have been five times higher by 2050 than they are today. In 1996, 25 per cent of the world's approximately 4630 mammal species and 11 per cent of the 9675 bird species were at significant risk of total extinction. If present consumption patterns continue, two out of every three persons on Earth will live in water-stressed conditions by the year 2025. More than half the world's coral reefs are potentially threatened by human activities, with up to 80 per cent at risk in the most populated areas. Exposure to hazardous chemicals has been implicated in numerous adverse effects on humans from birth defects to cancer. Global pesticide use results in 3.5-5 million acute poisonings a year. Some 20 per cent of the world's susceptible drylands are affected by human-induced soil degradation, putting the livelihoods of more than 1 000 million people at risk.

The UN in its first *Global Environment Outlook* report (GEO-1) argued that there was a need for the world to "embark on major structural changes and to pursue environmental and associated socio-economic policies vigorously" with "concerted global action for the protection and conservation of the world's finite and irreplaceable fresh-water resources" (GEO-1, UNEP, 1997). The conclusion of the WWF (2002) *Living Planet Report*, after showing a continually declining "living planet index", and a continually expanding "ecological footprint", is that if present trends continue, we will need to find two extra planets in less than 50 years.

The Prometheans, of course, and these would include Maddox (1972), Beckerman (1974, 1995), Simon (1981), Simon & Khan (1984), Bailey (1993, 1995, 2002), Peron (1995), and Lomburg (1998), argue that many such changes are unnecessary. They generally either deny the trends in worsening environmental damage and resource exhaustion, or deny such trends are connected to human activity—they are the result of natural fluctuations, or they point to

other increasing trends of progress (e.g., life expectancy). A particular focus of Prometheans has been to argue many resources are not increasing in scarcity. This has involved showing increasing trends in the size (known reserves) of certain resources (see Khan, 1977), or more usually, arguing that real price changes are the measure of scarcity – as things increase in scarcity their price increases – and trends in the real prices of resources are declining over time (see Barnett & Morse, 1963; Simon, 1981; Lomburg, 1998).

As Dryzek (1997, p. 45) notes, positions consistent with a Promethean discourse do not necessarily require formal articulation, and may in fact represent the unspoken assumptions that form the basis on which many humans continue to live. In other words, we may continue to live our lives in denial of such trends, even if we do not seek to explicitly deny them, or consciously believe those that do. “Exploitationists” base their behaviour on the unquestioned assumptions of “material value” and “abundance” (Norton (1989, pp. 139-140), and making similar points, Cairns (2001, p. 148) refers to “exceptionalism” and “exemptionalism.”

Exceptionalists believe that some humans are vastly exceptional to most humans and, as a consequence, are entitled to a markedly disproportionate share of the planet’s resources. Without question the superwealthy are different from the ordinary citizen in some regard, having contributed to a sizeable technological advance or having exceptional financial acumen, or both...Exemptionalists believe that human ingenuity, technology, and creativity free humans from the laws of nature that limit and control other species (Cairns, 1999)...[they] believe that resources are infinitely substitutable and exhaustion of one will ultimately lead to the appearance of a substitute when there is enough economic incentive to do so. Thus, humans are the ultimate resource and the species is not limited by finite natural resources.

Dryzek (1997, p. 60) likens the debate between survivalists and Prometheans to that of an accelerating car approaching a brick wall, with the Prometheans saying “so far, so good”, and with neither side able to adequately prove or disprove the existence of the wall, or, for the survivalists, how far in front the wall exists. Both sets of arguments, in fact, rely on the principle of induction and, as philosophers have argued, there is no logical or empirical basis upon which to accept this principle – it is an assumption that is accepted on faith.⁴ With no logical or empirical basis for either side of the debate to claim superiority in their knowledge claims about Earth’s future or that of our own, and with no logical or empirical basis on which to resolve (in advance) the debate about whether our current ways of life will in the future exhaust the planet’s resources and ultimately extinguish the human species, where does this leave us? Depending upon one’s beliefs, we face a range of options from do nothing because nothing needs to be done (Promethean optimism) to do nothing because while things need to be done, it’s too late and, as a species, we are incapable of sufficient change (fatalism).⁵ Between these positions lie a great many of us who believe we need to do something, and not just because it will help increase the likely survival rate of the human species. But the question is what to do?

Enter Sustainability and Sustainable Development

For those not filled with the optimism of Promethean thinking or the utter fatalism of others, the concept of sustainability, and more particular, the prospect of ‘sustainable development’, has emerged as a possible middle way forward – a way in which development may be viewed not as a problem, but as a solution, if we can just figure out how. In practice, however, the notions of sustainability and sustainable development are as vague and ambiguous, and as “unknowable” as the earlier question of whether humanity is set for destruction or to live happily ever after. Indeed, in many ways the terms have become sites for the same old contest with different sides seeking to ground the terms in their own interests. As Sachs’ (1999) notes:

Different actors produce different types of knowledge: they highlight certain issues and underplay others. How attention is focused, what implicit assumptions are cultivated, what hopes are entertained, and what agents are privileged depends on the way the debate on sustainability is framed. (Sachs, 1999, pp. 77-78).

How some members of the business community are framing the debate on sustainability is something we turn to next, but first it is instructive to see how others do so.

Wackernagel & Rees (1996, p32-40, see also the WWF *Living Planet Report 2002*) argue that sustainability is a simple concept that means: “living in material comfort and peacefully within the means of nature”. They suggest:

Imagine a bucket being filled with water at a fixed rate. The water in the bucket is a capital stock that can be drawn upon only as rapidly as the bucket is being refilled. This balanced withdrawal rate is a form of sustainable income. Similarly, nature is a “bucket” that is continuously replenished by the sun: photosynthesis produces plant matter, the basis of all biological capital and most other life, and climatic, hydrological, and other biophysical cycles are solar powered too.

Sustainability implies that nature’s capital should be used no more rapidly than it can be replenished. However, trade and technology have enabled human-kind progressively to exploit nature far beyond sustainable levels so that present consumption exceeds natural income (the “interest” on our capital). This leaves the next generation with depleted capital and less productive potential even as the population and material expectations increase.

The idea that sustainability is about maintaining “natural capital”, or “critical natural capital” intact and learning to live off natural income is held among many commentators (e.g., Schumacher, 1973; Daly, 1973, 1992; Ehrlich & Ehrlich, 1987; Gray, 1992; Dobson, 1998) who subscribe to what has now been termed “strong sustainability”. Such commentators are clear that *something* needs to be sustained or maintained, and that there are constraints and limits to development. An early example, the *World Conservation Strategy* (1980, IUCN), is clear about what it wants to be sustained, and claims a necessary condition for achieving sustainability is the maintenance of “essential ecological processes and life support systems” and the preservation of “genetic diversity”. Norton (1989), Daly & Cobb (1989), Daly, (1992) and Dobson (1998) emphasise sustainability requires *a scale of economic activity relative to its ecological life support systems*. On the basis of these definitions, there are clearly limits to the human enterprise (Zovanyi, 1998, p. 151).

There exist other definitions and commentators, however, who tend to be far more ambiguous about *what* is to be sustained. *Our Common Future* (the ‘Brundtland Report’) (1987) contains references to ‘sustainability’, but the report couples ‘sustainability’ with ‘development’, and this seems to have opened up the possibility for much confusion and debate about what sustainability is and is not. The Brundtland definition emphasises human needs and particularly those of the world’s poor and future generations. In full, it suggests:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- The concept of ‘needs’, in particular the essential needs of the world’s poor, to which overriding priority should be given; and
- The idea of limitations imposed by the state of technology and social organisation on the environment’s ability to meet present and future needs (WCED 1987 p43).

Whether ‘biophysical thresholds’ or ‘environmental bottom-lines’ should act as constraints over social and economic matters, or be balanced or traded-off against them, has become widely debated in the legal, planning, geography, ethics, economics and environmental literatures (e.g., Buckingham-Hatfield & Evans, 1996; Johnson, 1996; Norton, 1989; O’Riordan, 1993; Sagoff, 1988; Turner 1993).

Despite the above arguments, we are still left with sustainability as a somewhat abstract and primarily global concept. Sustainability, as defined above, poses a number of challenges for businesses and their decision makers, and not least because traditional measures of success that lead to the sustaining of a business, namely profit and efficiency, come under direct scrutiny (Bebbington & Gray, 1993; Milne, 1996). Traditional reporting, accountability, and control systems place at their centre the “organisation” (the entity concept) and operate off the premise that it will (or should) continue indefinitely (the going concern concept).

Defining sustainability as the progressive maintenance of the life-supporting capacities of the planet’s ecosystems requires the subordination of traditional economic criteria to criteria based on social and ecological values, and this begs the question whether business decision makers operating within the constraints of a capitalist system are capable of making sacrifices of profit and so resources, and ecosystems for future generations and other species (Gray, 1992; Milne, 1996; Gray & Bebbington, 2000). It also begs the question whether it is even fair to suggest that they should do so, or that there is any credence whatsoever in their own claims that they are able to do so (Gray & Milne, 2002, 2004). And it is against this backdrop that we now turn to see what sense business makes of sustainability and sustainable development, and how it can manage to produce versions of these concepts that are less threatening, and more consistent with its traditional *raison d’être*.

3. Business and the ‘Sustainability’ Agenda: Assessing the value of the 3BL

A key point to note is that business’ engagement with the sustainability agenda is firmly rooted in a history of practices of corporate reporting, and more particularly, with the reporting of impacts beyond an organization’s traditional financial transactions. In this section we look to a range of studies and our own work over the last 10 years or so in relation to the take-up of the 3BL in order to assess whether claims for 3BL reporting are borne out in practice.

The emergence of the 3BL

Initially, organisations confined themselves to the voluntary reporting of supplementary narrative discussion on selected environmental and some employee matters and this appeared in the conventional annual report to shareholders. From the 1990s in Europe, the UK, Canada and the USA, however, separate voluntary reports on organisations’ selected environmental, social, and/or health and safety impacts were increasingly issued by larger organisations (see, for example, KPMG, 1993, 1996, 1999; UNEP/SustainAbility, 1994, 1996, 1997; Lober *et al.*, 1997; Kolk, 2003). The KPMG surveys provide a means to track *trends in reporting*, and have generally shown increasing take up of such reporting in most countries, although such reporting occurs primarily amongst the world’s largest organizations in Europe and the US, and among those in the high impact industries such as chemicals and synthetics; forestry, pulp and paper; utilities; oil and gas, etc, a finding consistent with numerous academic studies (e.g., Patten, 1991; Hackston & Milne, 1996; Gray *et al.*, 1995).

While these trends might be welcomed, in the sense they accord with the heavy (indeed, unsustainable) burden (amongst all human activity) placed by the industrial big hitters on the physical environment (cf. Tyteca *et al.* 2002), sustainability and sustainable development were terms that were rarely used in such reports. Lober *et al.* (1997, p.69), for example, analyze 108 US environmental reports produced in 1995, and report that “Only 12% of policy statements ...refer to this concept. Few reports describe how their company relates to the concept of sustainability.” The prospect that corporate reporting on the 3BL could change this, then, was something to be welcomed, and especially by its proponents:

During the 1990s, perhaps five years behind the practice of environmental auditing and reporting, the art of social auditing and reporting began to gather advocates and practitioners... with the advent of sustainable development as a meaningful concept for both governments and businesses... and triple-bottom line thinking becoming a convenient metaphor for strategists in the field, the way was clear for the 'third dimension' of sustainability to be tracked and reported on (Wheeler & Elkington, 2001, p.4).

Following the coining of the phrase the "triple bottom line" by John Elkington (1997 and cf. UNEP/SustainAbility, 1996), corporate reporting practices in some European organisations continued to evolve. Wheeler & Elkington (2001, p.4) point to a number of significant developments in 3BL reporting: the publication of a "set of serious case studies in social accounting, auditing and reporting" (i.e., Zadek *et al.*, 1997); SustainAbility's (1999) publication, the *Social Reporting Report*, and; the publication of *Issues and Trends in Corporate Social Reporting* (PIRC, 1999). Claims for the take-up of social reporting from proponents like Wheeler and Elkington were characteristically enthusiastic:

... in just five years, social reporting had moved from a fringe activity pioneered by socially conscious but non-mainstream companies into a credible and serious practice embraced by a number of corporations (Wheeler and Elkington, 2001, p.4).

The KPMG surveys do seem to confirm the take-up of the 3BL in Europe. The 1999 survey (KPMG, 1999, p.19) analysed environmental policies, noting that the percentage referring to sustainable development as a topic increased from 12 to 36%. Indeed, the 2002 KPMG survey itself became not an international survey of environmental reporting (KPMG, 1993, 1996, 1999) but the *KPMG International Survey of Corporate Sustainability Reporting 2002*, and noted 14% of the Global Fortune Top 250 and 12% of the top 1900 (top 100 in each of 19 countries) companies surveyed issued "sustainability" reports. Kolk (2003, p.287) notes a rising number of companies (between 1998 and 2001) that were including "societal and sometimes also financial issues in their reports –these were only isolated cases in the 1998 study." Kolk (2003, p.279) analyses 'sustainability reporting' using both trend and longitudinal panel data for the Fortune 250 in 1998 and 2001, and reports a continued and significant rise of sustainability reporting amongst the largest and most visible multinationals. The highest growth in sustainability reporting is reported as having taken place in France and the UK, followed by Germany.

Outside Europe, take up of the 3BL has been slow, however,. In the Kolk (2003, p.289) study, reporting in the US was found to be "slightly decreasing in the trend analysis, and stabilizing when viewed longitudinally." Japanese companies were found to be concentrating on environmental reporting – something that Kolk puts down to their relatively recent experience with extended performance reporting (Kolk, 2003, p.289). Milne *et al.* 2001 suggest that in New Zealand, corporate social reporting, and health & safety reporting never really emerged as it did in the early era of reporting in Europe, but instead seemed set to leap straight into 3BL reporting with developments only catching on in the last three or four years (Milne *et al.*, 2003; Chapman & Milne, 2004).

Despite the increasing take up of 3BL reporting, however, the concept seems to have created some uncertainty; and definitions and integration measures vary (Vandenberg, 2002). At its narrowest, 3BL reporting involves measuring and reporting economic, environmental and social performance objectives that are pursued simultaneously. A broader view suggests that 3BL reporting involves assessing an entity's values, strategies and practices and how these can be utilized to achieve economic, environmental and social objectives (SustainAbility, 2003). Reference to economic, social and environmental performance indicators, however, and particularly their integration, has also led to the term being used interchangeably with "sustainability". In part, this confusion is due to Elkington's own references to the relationship between the three aspects of the 3BL:

The three lines represent society, the economy and the environment. Society depends on the economy – and the economy depends on the global ecosystem, whose health represents the ultimate bottom line.

Elkington's definition at least hints at the notions of "strong" sustainability we explored in the previous section, but various studies suggest organizations are superficial in the way they refer to 'sustainability' concerns. Before we turn to a critique of these aspects of reporting, however, the next section reviews the evidence on the quality and comprehensiveness of 3BL reporting.

Analyses of the breadth and depth of reporting

As Hammond & Miles (2004, p.63) note, there is a "plethora of professional scoring protocols and ranking exercises" that are being used to benchmark organizational reports against good practice. Among these, the benchmark surveys associated with the UNEP/SustainAbility (1994, 1996, 1997, 2000, 2002, 2004) have undoubtedly been influential, and are increasingly candid in their evaluations. The benchmarking surveys concern best practice reporting, and seek to provide accounts of developments among the world's leading reporters. As such, they typically confine the analysis to mostly large European, North American and Japanese companies.

The 1994 report introduced the idea of a five-level grading system to assess reports. Stage 5 is considered to be 'Sustainable Development Reporting' and entails reporting "based on the extensive use of quantitative methods (such as life-cycle assessments and mass balances) and on strong links with industry-wide and national sustainable development reporting against pre-agreed targets" (p. 19). The 1994 report, however, highlighted that most companies were at the earliest reporting stages (39% at Stages 1 and 2); that a further 25% had reached Stage 3; only 5% Stage 4; and that Stage 5 remained "unexplored territory". Corporate environmental reporting at this time was "confined to purely environmental reporting..." (UNEP/SustainAbility, 1994, p.51).

The grading system was updated in the 1996 benchmark report in relation to the aims of addressing "the apparent... bottleneck at the original Stage 4..." and "to begin to open up the 'black box' of Stage 5 sustainability reporting" (1996, p.6). A key point to note is that with this change marks a shift whereby sustainability reporting (Stage 5) began to be equated with the 3BL: "Stage 5 is characterized by integrated environmental, social and financial accountability..." (1996, p.6) and "Sustainable development will require reporting against economic, environmental and social indicators" (1996, p.65). The 1996 report also introduced a scoring system based on fifty 'reporting ingredients'⁶ divided into five principle categories (management policies and systems; input/output inventory; finance; stakeholder relations; sustainable development); thus the approach provides a quantitative summary of firms' reports allowing them to be ranked. The 1996 report showed improving quality of reporting, but companies were predominantly located at Stage 4. Only one company, the Body Shop International, was in the process of entering Stage 5 because of its emphasis on social impacts.

The system was used to benchmark the reports of 100 companies in 1997, and, using slightly revised scoring criteria (see SustainAbility 2003), 50 companies in 2000, 2002 and 2004. Notably, the revised reporting ingredients drew substantially on contemporary practice, as opposed to first (sustainability) principles. In 1997 there was still enthusiasm for the "dramatic upward trend in report quality (UNEP/SustainAbility, 1997, p.3); albeit that only the Body Shop was (still) the only report "that comes close to our definition of Stage 5 reporting." The 1997 focus on sectoral reporting analysis, however, exposed companies' failure to engage with the essential issues of the existing industry business models:

Usually, the critical issues are linked directly to the company's core business, yet they are often ignored. A biotechnology-based company fails to refer to genetic engineering, for example, or an auto or oil industry [report] chooses to ignore the global warming agenda. The banks are also a prime example of this problem: they are happy to discuss green housekeeping measures, but most provide little or no information on the social and environmental issues associated with their mainstream financial activities. (UNEP/SustainAbility, 1997, p.28)

By the 2000 report, the leading edge was reported as having shifted from the early phase of environmental reporting to "embrace" the 3BL (UNEP/SustainAbility, 2000, p.2). Again, however, companies were reported as still failing to use the 3BL to address their most important sustainability impacts (their 'elephant in the bedroom'); or their activities and impacts in the emerging economies. By 2002, UNEP/SustainAbility's most striking conclusions were that "Best practice in sustainability reporting appears to be hitting a plateau, with scores virtually unchanged since 2000" and that only "Seven companies scored over 50% of the total benchmark score" (2002 Report, p.2). Moreover, the emphasis on the 3BL seemed to be detracting from what had so far been an upward trend in the quality of *environmental* reporting: "...greater reporting on social and ethical material" was occurring "at the expense of the environmental dimension" (2002 Report, p.3). Companies also are no further forward with facing up to the unsustainability of their business models.

The latest of the UNEP/SustainAbility (2004) surveys suggest "mixed" news for those seeking improvements in reporting. Companies exceeding 50% of the benchmark score now number twenty, but many only just exceed this halfway mark – an improvement attributed to the GRI guidelines. Many of the top 50 reporters were "new entrants" suggesting possibilities for rapid learning. On the other hand, existing reporters dropping out of the top 50 were not improving at similar rates, and "materiality" is noted as a big issue - the concern being that reports are "cluttered with information of little apparent use to readers, while missing out on the big picture risks and opportunities" (2004, p. 34). The 2004 report also notes that while there has been extraordinary growth in the number of companies reporting since 1990, the trend at 2003 seems to have hit some sort of plateau.

The UNEP/SustainAbility surveys, however, are limited to (mostly) very large and leading companies, and so cover only the tip of the iceberg in terms of the number of companies producing (or claiming to produce) 3BL reports. Academic studies using benchmark criteria have the potential to demonstrate that the breadth and depth of a great many 3BL reports are significantly inferior to those surveyed by UNEP/SustainAbility, and also that the benchmark criteria being used may not cover relevant stakeholder issues and concerns, and especially for some sectors (Sinclair & Walton, 2003). Milne *et al.* (2003) and Chapman & Milne (2004, see also Morhardt, 2001; Morhardt *et al.*, 2002; Sinclair & Walton, 2003), for example, use UNEP/SustainAbility's criteria to analyse a series of New Zealand reports. The conclusions from these studies are that apart from leading organisations the standard of reporting is very poor, and especially so compared to international best practice. In Milne *et al.*'s surveys, the two "stand out" reporters are included as part of UNEP/Sustainability's surveys, suggesting that for every leading reporter meeting half of the total framework score, there are a great many more unable to do so. Morhardt *et al.*'s (2002) overall findings are that there is a significant gap between the benchmarks provided by guidelines like the GRI and UNEP/SustainAbility and what companies *actually* report. Similarly, Sinclair & Walton (2003) argue and evidence that many timber and paper companies do not report on issues significant to their stakeholders. A major failing identified by Sinclair & Walton (2003, p.335) is therefore that companies fail to define the 'corporate profile' (a characteristic, they note, of the GRI), which "will prevent readers from fully understanding and evaluating the content of a report."

As Gray & Milne (2004) conclude: The quality – and, especially, the *completeness* – of many 3BL reports are not high. Despite increased awareness, recent reporting remains little better than that of the early European pioneers in the early 1990s. And with a few notable exceptions, the reports cover few stakeholders, cherry pick elements of news and generally ignore the major social issues that arise from corporate activity such as lobbying, advertising, increased consumption, distributions of wealth and so on. The reports often refer to “sustainability” and “sustainable development”, but virtually unaddressed are issues of equity and social justice (Gray & Bebbington, 2000; NEF, 2000; Owen *et al.*, 2000), and completely unaddressed are issues of the scale of development, limits and constraints to that development, and future generations (Beder, 1997; Gray, 1992; Milne, 1996; Welford, 1997): issues we identified in the previous section as core to sustainability concerns.

What is also suggested here, and has been of concern to academics for some time (e.g., Wiseman, 1982; Deegan & Rankin, 1996), is that reporting and performance are not the same (Morhardt *et al.*, 2002). “Benchmarking environmental reports is not benchmarking environmental performance”, as UNEP/SustainAbility (1996, p.12) bluntly put it. Morhardt *et al.*, (2002, p.229, our emphasis) identify two consequences of this situation, each potentially exacerbating this lack of value in the evaluations available under benchmarking systems:

...(i) environmentally benign companies, with no substantive reason to discuss many topics, will have low scores if they restrict themselves to topics relevant to them and (ii) any company wishing to improve its score can do so simply by adding topics, *irrespective of performance*.

Further, since the ‘reporting ingredients’ are drawn from contemporary reporting practices (UNEP/SustainAbility, 1994), the whole process becomes dangerously self-referencing as companies are essentially encouraged to learn from existing frameworks and business experience, both of which are based on existing (unsustainable) business models.

Such concerns for better performance reporting also surface in Morhardt’s (2001, p.891) discussion of the lack of comparability of company reports, noting that companies differ in their mix of products and technologies, and so differ in their environmental sensitivities and impacts. Indeed, such concerns point not, we contend, to any need for greater systematization of environmental (or sustainability) reporting, but (as we will discuss in a later section) to a need for greater knowledge of environmental sensitivities – indeed to greater ecological literacy. As Tyteca *et al.* (2002, p.2) put it, the issue is to understand the relationships between firms and the environment:

All industrial processes involve the consumption and manipulation of energy and materials, leading to the production of products, services and wastes. These physical transactions constitute the most direct relationship between firms and the environment. How do these relationships evolve over time? How can such changes be explained and how can such an analysis inform environmental policy makers in government and industry?

So far, then, we can say most organisations have a long way to go in terms of discharging their accountability for their social and environmental impacts, and there is some considerable way to go before many will be convinced such accounts are complete, honest, and transparent. Furthermore, and more significantly, improved reporting against (standardised) benchmarks may fail to deliver meaningful information that addresses specific stakeholder concerns, and may do little to improve a firm’s understandings of its relationship with the physical and social environment.

Socially Constructing Sustainability

Moving away from mechanistic analyses of report content a third and final set of studies have begun to draw attention to the nature of the language (or narratives or ‘stories’) used by 3BL reporters. While we characterise these studies as (necessarily) interpretive, qualitative and subjective, and therefore contestable, their power lies in exposing the deeply concerning way in which business organisations are confusing, either deliberately or otherwise, their attempts to be responsible for their social and environmental (and 3BL) impacts with concepts like sustainability and sustainable development. This is an emerging vein of work, but we would point to studies by Laine (forthcoming), Livesey, (2002), Livesey & Kearins (2002), Milne *et al.* (2004a, 2004b), and Tregidga & Milne (2004) which treat reports as serving public relations, impression management and ideological tools as much as means to report performance to concerned stakeholders.

Such studies aim to illustrate how organisations through external reports seek to frame and define sustainability and sustainable development in ways that are largely consistent with business-as-usual. Levy (1997), for example, identifies four ideological assumptions that often underpin business and the environment: namely, the environment can and should be managed; corporate managers should be left to do the managing; environmental management is a win-win opportunity – and this provides a further rationale for trusting business to manage it – it is in their self interest to do so; and traditional management tools (based on science and technology) are the means to do the managing. And one of the principal means by which such ideological assumptions can be strengthened is through external reporting (Livesey, 2002). Milne *et al.* (2004a), for example, investigate the narratives contained in eight 3BL reports, identifying such themes as: sustainability-as-journeying; expert management; win-win; caring for stakeholders; and balancing. Milne *et al.*, (2004b) further explore the journey metaphor and emphasis that such usage has the potential effects of coming to know the concept of sustainability as something which can be (positively) associated with learning, with progress, and process (means). By focusing on the *journey* of sustainable development, however, reporting companies do not have to deal with some of the harder issues, particularly identifying or debating an end point.

Livesey (2002), Milne *et al.* (2004a), Laine (forthcoming), and Tregidga & Milne (2004) all observe that the reports convey a strong sense that measurement, management, and expert control will lead to sustainable development in that what can be measured can be managed — and this is often seen as a rational process tied to “eco-efficiency”. Fairly common aspects concern eco-efficiency gains (less inputs, less waste, and therefore less costs), competitive advantage (greater market share, greater sales revenues), and better risk management (less regulatory costs, protecting existing sales). In the “production of greenness” (Levy, 1997), organisations are also found to tie environmental issues to “caring”, “concern”, and “responsibility” (Livesey & Kearins, 2002; Tregidga & Milne, 2004). A further and particularly important way in which sustainable development is presented in these reports is through the 3BL in which the issue of conflicting demands (between stakeholders or the environment and development) are silenced with reference to “balancing” (Livesey, 2002; Tregidga & Milne, 2004). An overwhelming sense gained from the reports is that business is capable of simultaneously satisfying all demands — there are no trade-offs. Indeed, for these businesses, sustainable development is largely defined in this way, and in the process, organisations can report they are “doing” sustainability.

4. Building a “Business Case” for Sustainable Development

Businesses have not been acting alone in taking up the sustainability agenda. Indeed, increasing support for the 3BL and a ‘business case’ for sustainable development is now contained within an institutional context that surrounds business. Support for the 3BL comes from (at least) four fairly distinctive sources: multi-agency initiatives; consultancies, including the benchmarking industry; accounting professions; and business associations. In this section, we review and analyse some of these initiatives, illustrating, consistent with developments in reporting, the way in which sustainability and sustainable development have become increasingly synonymous with the 3BL.

Multi-agency initiatives – the GRI

Arguably, among the initiatives to evolve in support of non-financial reporting, the Global Reporting Initiative (GRI) represents the predominant development; the GRI is both an independent institution and what is claimed to be the world’s first standardised approach to sustainability reporting. Notably, the GRI sustainability reporting guidelines (GRI, 2000, 2002a, 2002b) were recognized in the World Summit on Sustainable Development Plan of Implementation. The development of the GRI indicates the inter-connectedness of organisations in the field of social, environmental or sustainability reporting: as Morhardt *et al.* (2002, p.220) note, the GRI is promoted by CERES and the United Nations Environment Programme (UNEP), which jointly convened the GRI at the end of the 1990s.

The influential UNEP/SustainAbility benchmarking report series also acknowledges a ‘relationship’ with the GRI. For example, the 2000 UNEP/SustainAbility Report (p.6) is stated as having “been prepared in the context of – and with encouragement from – the Global Reporting Initiative...recognized as the worlds’ leading triple bottom line framework.” By 2002, UNEP/SustainAbility (2002, p.14) are characteristically enthusiastic about the progress of the GRI, noting “Five years on, the GRI has got off to a flying start... Its Guidelines... are recognized as setting the pace in this emerging field...” At the same, however, they also cautioned that “the GRI guidelines are expanding without sufficient guidance as to appropriateness in different situations. Overall, this state of affairs will... actually start to hold back, rather than enhance, companies’ ability to provide truly useful, functional accountability with stakeholders...” (UNEP/SustainAbility, 2002, p.62). Two years later, UNEP/SustainAbility (2004, p. 5) notes continuing influence of the GRI but also some possible concerns:

It is clear that GRI has been enormously successful in achieving the widespread adoption and acceptance of the guidelines. However, with non-financial reporting reaching critical mass GRI is at a critical stage in its evolution. Increased standardization of reporting brings both risk and opportunity – opportunity to influence hundreds more companies than previously, coupled with risks in the form of lower rates of innovation.

The 2004 report (p. 39) also notes that the GRI guidelines include a section on Reporting Principles (e.g., transparency, completeness, sustainability context, etc...), of which general definitions are provided, but a “serious gap remains, however, in understanding and responding to the challenge of the Reporting Principles”, and “clarity on how they work in practice is, to date, thin on the ground.”

Despite the practical problems with the GRI, the guidelines, we suggest, represent a source of fundamental confusion over what constitutes sustainability, and particularly in perpetuating sustainability’s confusion with the 3BL (GRI, 2000, 2002a). While Elkington’s (1997) definition resembles that of the earlier references to protecting ecosystems capacities, the GRI

and many businesses have tended to assume that any references to the three aspects of the 3BL, and their integration, is consistent with sustainability or sustainable development (Gray & Milne, 2002, 2004). Perhaps a source of the confusion is that as Morhardt *et al.* (2002, p.220) perceive it, the GRI seemingly “go[es] well beyond any previous [guidelines] in their inclusion of financial and social criteria.” Where we disagree with Morhardt *et al.* (2002, p.220) is in their assertion that “It is the addition of these criteria that distinguish ‘sustainability’ reporting from straight environmental reporting.” While adding more elements to previous sets of guidelines might represent an improvement, it does not make them about *sustainability*. Indeed, some of the strongest critical comments provided on the GRI throughout its development have concerned its apparent reluctance to provide a definition of sustainability or sustainable development. Apart from individuals and groups calling for the guidelines to provide a “definition” of sustainability and outline “sustainability principles” (Hawken & Wackernagel, 2000; Odd, 2002; FEE, 2002; Friends of Portfolio 21, 2002; Wackernagel, 2002), concerns were also raised that companies could “...sell their GRI compliant report as a sign of “sustainable behavior” (Wackernagel, 2002).

The benchmarking industry: revisiting the UNEP/SustainAbility benchmarking reports

The influence of the benchmarking industry on reporting practice is such that it has become in itself an important element in the field. Such influence, we would argue, brings both benefits and concerns. As Hammond & Miles’ (2004, p.74) UK study suggests, quality assessments of reports:

... at least in part, [is] achieving the goal of encouraging improved CSR practices by establishing best practice and promoting competition, although this is predominantly in the area of environmental reporting. In addition the [quality assessors] are indirectly promoting invaluable support for many corporate social, environmental and/or community executives struggling to justify and secure corporate funds for continued reporting activity.

Beyond improved reporting, benchmarking also may “act as a spur for companies to improve their performance and extend their accountability” (UNEP/Sustainability, 1996, p.12), but these claims are considerably more difficult to evidence. Moreover, while some companies have been quick to publicize their high scores (Morhardt, 2001, p.881), in some cases this may have been less about gaining credibility and more about deflecting attention from poor social and environmental performance *per se* (Hammond & Miles, 2004, p.62). Further, we are concerned that although benchmarking systems do not represent guidelines as such, their influence on practice (cf. Hammond & Miles, 2004, p.62) is such that a good score becomes an end in itself. Notably, too, the benchmarking series do not track reporting developments for many reporters through time – what has happened to those reporters who drop out of the best 50 or 100 in a given year? Have they improved, but not enough? Got worse? Stopped reporting? Instead, the series reports celebrate the “best” 50 at a given point in time. Of yet greater concern, however, is whether the encouragement offered by UNEP/SustainAbility has been anything to do with sustainability, and to address this point we track some of the development of the report series.

Going back to the first (1994) report, there were statements that (admittedly tacitly) conveyed ideas about understanding cumulative industry impacts on limited ecosystem capacities:

... corporate environmental reporting is only one aspect of the much wider challenge of sustainable development reporting. If nations and world regions are genuinely to move towards environmental sustainability, corporate reporting must become part of industry sector reporting against declared targets – which in turn must become part of national or regional reporting against national and regional environmental goals (Introduction to 1994 Report, p.10).

Most significantly, Stage 5, in the five-stage model as it was then conceived, conveyed a conception of sustainability very much in line with those conceptions explored earlier:

STAGE 5: Sustainable development reporting. Aim: no net loss of carrying capacity. Linking of environmental, economic and social aspects of corporate performance, supported by indicators of sustainability. Integration of full-cost accounting (1994 Report, p.18).

...would-be Stage 5 reporters should think carefully before embarking on this path....Longer term, some products, processes and even entire industries may prove to be unsustainable – even when run efficiently...(1994 Report, p.20).

The reframing of Stage 5, it seems, was motivated by frustration that firms could not progress beyond Stage 4 given the demands of Stage 5: "...whilst more and more companies were entering Stage 4, none could independently qualify for Stage 5. This is because sustainability reporting requires a level of integration with other reporters and an enabling framework for all key actors that no company could single-handedly achieve" (UNEP/SustainAbility, 1996, p.19; and cf. UNEP/SustainAbility, 1997; see also Milne, 1996, Gray & Milne, 2002, 2004).

As we noted, Stage 5 was re-framed in 1996 as the 3BL. In the new Stage-5, references to carrying capacity were gone; and the earlier suggestions of an onus *on companies* to move towards multi-level reporting to reflect cumulative impacts was replaced by a more limited conception of the responsibilities of individual companies. Albeit that a new (and arguably welcome) emphasis on stakeholder accountability was introduced, the new Stage 5, we believe, had much less to do with sustainability:

The Stage 5 challenge can be framed thus: to meet the requirements of the triple bottom line, companies must demonstrate responsibility by reporting fully on their environmental, social and economic performance, governments must create new frameworks for this accountability and markets must promote sustainability by acting on the information (UNEP/SustainAbility, 1996, p.22).

The 3BL concept has become increasingly confused with sustainability in the report series. The UNEP/SustainAbility 2000 report, for example, introduced 'The Triple Bottom Line Scorecard' to measure the comprehensiveness of 3BL coverage: "*environmental performance* is covered most comprehensively (with companies averaging 53% of the possible score) while *economic* (32%) and *social & ethical performance* (29%) receive the lowest score" (2000 report, p.11, emphasis in original). Acknowledging SustainAbility's insistence that the GRI embraced the 3BL, the 2002 UNEP/SustainAbility Report (p.4) admits:

...now we may be paying the price.... we see... for the first time a decline in the coverage of environmental issues and performance relative to wider social, economic and governance issues.

The UNEP/SustainAbility benchmarking initiative is essentially well-intentioned, but it has also not bucked the trend of attempting to build a business case. As the first report stated, "The business case for reporting at each successive level clearly has to be established for each company and each industry sector." Yet this way forward seems destined to stall, unless governments legislate for the 3BL and stakeholders take their cues. The second report (UNEP/SustainAbility, 1996, p.43) reveals a touching faith in the likelihood of "the principles of stakeholder capitalism increasingly tak[ing] root around the world – and flower[ing] in different ways." Getting beyond the business case, however, we suggest, requires UNEP/Sustainability to return to its original conceptions of sustainability, distance itself from the uncritical 3BL reporting model its report series (and now the GRI) has developed, and make real demands for business to re-frame unsustainable industry and business models.

Accountancy bodies – the case of developments in the UK

Beyond the GRI and benchmarking, it is notable an increasing number of accountancy bodies are now engaging with notions of sustainability and sustainable development. The UK-based Association of Chartered Certified Accountants (ACCA) has had a long running involvement with issues of firstly corporate environmental reporting, then social reporting, but more recently ‘sustainability’ reporting through its reporting awards schemes, sponsoring of research reports, seminars, and engagement with other organisations like the Institute of Social and Ethical Accountability (ISEA) and the GRI. Other bodies, however, have now entered the fray through a number of initiatives and pronouncements. The concern we have with these initiatives is the same concern as with business reporters and the reporting frameworks, and that is that the notion of sustainability cannot be other than translated into the logic and language that already pervades such institutions. And this seems to occur in several ways – through notions of (again) the 3BL, through the ‘entity’ concept, through ‘monetizing’ the environment, and through the conventional language of accounting.

The Institute of Chartered Accountants in England and Wales’ (ICAEW) (2004, p.8) recent initiative, *Sustainability: the role of accountants*, for example, defines sustainability as taking “full account of an organization’s impacts on the planet, its people and the future.” How this is to be achieved is simply not touched upon directly, but the document sets out to differentiate its focus from what it suggests is a tendency to focus on reporting, emphasising instead a number of mechanisms which entail information flows (corporate policies, supply chain pressure, voluntary codes, benchmarking; taxes; permits and enforcement). Ultimately, then, the focus of accountants is to aid and benefit from a model of sustainable development not dissimilar to that noted above, and in the process, existing accounting and auditor skills feed into ‘sustainability’ through such developments. Emphasising the entity and 3BL concepts, the ICAEW (2004, p.8) notes “Sustainability reporting at the enterprise level ...aims to represent an enterprise’s environmental, social and economic performance and the related impacts on the world around it.” And this seems to be a common approach in seeking to bring sustainability into the ambit of organisational accounting. New Zealand’s Institute of Chartered Accountants’ Taskforce Report (2002, p.1) on ‘Sustainable Development Reporting’ had likewise suggested such reporting was “external reporting of the economic, social and environmental performance and impacts of an entity”.

Such notions of sustainability are also present in the development of the ACCA reporting awards criteria and schemes. To match reporting developments, and particularly the emergence of social and 3BL reports, the criteria and schemes have developed to provide awards for best social reports and best ‘sustainability’ reports. The first ‘sustainability’ reporting awards were provided in 2001 with three joint winners from 30 entrants and nine short-listed. Again emphasising the 3BL, the ACCA Judges report (2002, p.27) noted:

Reporting on sustainability issues is also more complex than social and environmental reporting, as not only do three elements (economic, environment and social) need addressing compared with one, but there is also an intricate interaction between the three that can be hard to identify, quantify, or communicate.

Further commentary from the judges and reporting criteria suggest reporting on sustainable development is achieved by giving the three elements equal footing in the report, addressing core business issues, combining social, economic, and environmental disclosures with the traditional financial report, providing a comprehensive overview of the organisation’s activities, and linking sustainability issues with corporate governance. Importantly, however,

from our perspective, the judges' report (2002, p32) also emphasised a need for organisations to:

...consider how growth in profitability (based on the 'business as usual' process of increased throughput) can be reconciled with the pursuit of sustainable development in a world that is subject to significant ecological stress.

And while such emphasis might be welcomed, it failed to be reiterated in the following year's judges' report, which instead seemed to provide overall remarks on all the reporting categories (environmental, social, and sustainability), but additionally encouraged 'full-cost accounting' and reporting on difficult issues like climate change impacts. The 2003 winning 'sustainability' report (the Co-op bank) is largely heralded for its "partnership approach – attempting to balance the needs of all its stakeholders", "comprehensive and complete coverage of all issues (economic, social, environmental)", and "discussing the progress of its ethical and ecological value analysis". Again, then, we see further emphasis on the 3BL and (confusion with) sustainable development and sustainability. The reporting developments are highly commendable, but in the light of the discussion so far, has organisational reporting reached a point where organisations - and particularly ones like Shell – who's basic business model is so clearly associated with climate change - should be awarded accolades for 'sustainability' reporting? Or, to put it the other way round, if organisations like Shell can be receive awards for best 'sustainability' report, does 'sustainability' in such a context have any meaningful content?

A further development we observe in the accounting professions, and one that perhaps seems set to continue to develop given the above judges' comments (see also the UNEP/SustainAbility 2004 report), is the monetizing of social and environmental impacts in an attempt to provide the means to "internalise externalities". The Chartered Institute of Management Accountants (CIMA) in association with Forum for the Future (which claims to be the UK's leading sustainable development charity) have produced a methodology for quantifying in money terms companies' 'environmentally sustainable profits' (Howes, 2002).⁷ Notably, the Forum/CIMA methodology, however, is explicitly based on a business case; although the notion of reducing conventional profits in line with the 'monetised' cost of social and environmental externalities represents a significant challenge to the conventional accounting notion of limited corporate responsibility. The basic problem we judge with these full-cost approaches, however, is that they have little to do with sustainability, assume a great many aspects of life can be 'reduced' to accounting metrics and that implicitly all things are comparable and tradable, and fail to take into account future generations (for example, see Milne, 1996 and the references therein). Moreover, they seem rather naïve in assuming organisations will voluntarily seek to internalise costs they currently have the power and privilege to externalise and avoid (Milne, 1991; Bebbington & Gray, 1993; Bakan 2004).

Business Associations – the case of the NZBCSD

Generally, business and industry associations play key roles in shaping thinking and practice through a range of publications and activities. Business and industry associations, however, exist to protect the interests of their members, and so it should come as no surprise that such groups will seek to influence agendas accordingly. At the extreme, such associations are accused of denying problems, delaying reform, dividing the opposition, and duping the public through PR campaigns (Bruno *et al.*, 1999). Other concerns, however, focus on the manner in which attempts to provide self-regulating behavioural guidelines thwart demands for stronger reforms. In the context of reporting, while such guidelines can play a "significant role in accelerating wider reporting" (UNEP/SustainAbility, 1994, p.26), they can also frustrate

ongoing developments. Mobilizing the resources of leading industry associations to promote reporting practice can come at a price, as UNEP/Sustainability noted quite early:

...the associations and reporting framework organisations will need to do a great deal more to ensure that expressions of corporate or business responsibility are based on real targets and accountability. (1994 Report, p.16)

Up to now, industry codes of conduct have enjoyed a honeymoon period, but unless their weaknesses are addressed, the legitimacy of the voluntary approach is likely to suffer ... (1996 Report, p.50).

To illustrate the influence of business associations we draw here on Milne *et al.*'s (2004a) analysis of the New Zealand Business Council for Sustainable Development (NZBCSD). In a relatively sparse and isolated business community, where there is less 'noise' from a wider range of influences, the case illustrates the NZBCSD's impact on providing 'sustainable development reporting' guidelines, and articulating a 'business case' for reporting and "doing" sustainable development. The NZBCSD takes its lead from the World Business Council for Sustainable Development (WBCSD) and that mother organization has been active in seeking to ensure a business voice is represented on sustainable development, and particularly at the Rio and Rio+10 summits on sustainable development (Schmidhieny, 1992; WBCSD, 2002). While the WBCSD has not sought to produce reporting guidelines, it has sought to define and articulate arguments for sustainable development and corporate social responsibility (WBCSD, 2000a, 2000b, 2002; see also Greer & Bruno, 1996; Rossi *et al.*, 2000; Bruno & Karliner, 2002). Core elements in those arguments are: continuing faith in markets and free trade; eco-efficiency; corporate social responsibility through working with families, local communities, and society; dialogue from partnerships; informed consumer choice; innovation, and; monetizing environmental impacts.

While many of these elements are now reproduced in the NZBCSD's (2001a, 2001b, 2002) publications and pronouncements, including the 2002 *Business Guide to Sustainable Development Reporting*, Milne *et al.*'s (2004a) analysis reveals an early awareness and willingness to acknowledge the broader and more challenging aspects associated with the concept of sustainability. Concern for issues we raised in section two – "social and ecological limits", "future generations", "ecological systems", "life-sustaining functions", as well as dealing with unsustainable "patterns of production, consumption and waste management" – were certainly canvassed at the initial NZBCSD leadership forum. Subsequently, however, as the NZBCSD has sought to popularise itself, and promote its thinking among businesses, these aspects of sustainability have since disappeared. Instead, the basis for 'sustainable development reporting' is one of: increased financial return for and reduced risk for shareholders; attracting and retaining employees; improving customer sales and loyalty; growing supplier commitment; strengthening community relations, and (finally); contributing to environmental sustainability.

And while the latter two aspects to the case at least hint that some wider notion of responsibility and accountability to society and for the environment has been retained, Milne *et al.*, (2004a) note that they also are often presented in terms of their economic and instrumental value to business organisations. Reporting, it was suggested, would "comfort and reassure stakeholders regarding a company's management values and approach to business", and can "...potentially lessen adverse comments from the community about a business and enables the company to profile the positive contribution it is making to the community" (NZBCSD, 2001b, p.9). Indeed, Milne *et al.* illustrate how the NZBCSD has moved to consolidate a position on sustainable development that is incremental, entity-focused, and strongly argued on economic grounds. The subsequent articulation of the NZBCSD's 'business case' has tended to produce an argument for sustaining *business*, and perhaps more particularly, *their own businesses*.

Sustainable development reporting seems instrumental to such ends. Furthermore, Milne *et al.* argue the NZBCSD appears to have become increasingly candid about its business case and, in line with Wackernagel's (2002) fears, the capacity of business to 'do' sustainable development, as illustrated by the (then) Executive Director, Roger Spiller:

Sustainable development offers business the ability to increase returns and reduce risk...It is led by individuals and business who know there is more to good business than the next quarter's bottom line. It is not business as usual and it is not necessarily easy...The council's projects answer the why and how of sustainable development...business is an indispensable part of the solution to the problems of the world...sustainable development is good for business and business is good for sustainable development (Spiller, *NZ Herald*, 24 October, 2002).

The notion that business might benefit from what, in essence is being promoted – i.e. eco-efficiency, and stakeholder management - is well established. That it might actually improve the financial bottom line, and that the NZBCSD and its members have chosen to endorse it, is not at issue here. Rather, what we are objecting to is that such a position should be *presented as being synonymous with sustainability and sustainable development*. It simply is not. As Hawken (2002) puts it "...as corporations and governments turn their attention to sustainability, it is crucial that the meaning of sustainability not get lost in the trappings of corporate speak...I am concerned that good housekeeping practices such as recycled hamburger shells will be confused with creating a just and sustainable world." We need to get beyond the change-but-no-change variety of environmental or sustainability reports and related notions of eco-efficiency that are currently held up by business as heralding in the new dawn. In the next section we attempt to articulate something of this challenge.

5. Beyond Eco-efficiency and the 3BL: Thinking that Demonstrates Ecological Literacy

Thinking that win-win eco-efficiency will do very much to 'control' environmental impacts and problems is fallacious because it can encourage greater absolute material and energy throughputs, and if these are the source by which profits are made, it will almost certainly do so without genuine changes in beliefs about "success". Eco-efficiency as McDonough & Braungart (1998, p.4) note:

...works within the same system that caused the problem in the first place...It presents little more than an illusion of change. Relying on eco-efficiency to save the environment will in fact do the opposite – it will let industry finish off everything quietly, persistently, and completely.

Fortunately, ideas and tools are emerging for understanding 'the entity' and its relationship with nature, although the rate at which they are being picked up and utilised in practical business thinking is woefully inadequate. A partial condition for the take-up of these ideas and tools is a growth in employment of people in business and industry who are ecologically literate (Orr, 1992) and/or the (re-)education of those already employed. In this context, we note that the primary driver of the oil company BP acknowledging climate change was employee pressure; around half of BP staff have postgraduate science-based qualifications. We also note the distinction made by UNEP/SustainAbility (1996, p.74) between the 'Anglo-Saxon' (North American/US) and 'Rhine' (German/Scandinavian) models of reporting; with the former based on management systems, whilst the latter is based on "mass balance – or input/output – performance data." We see the latter as more closely connected to an accounting that, increasingly, must be based on the general principle that Murray (1999, p.35) outlines:

[for the last] two centuries, time has been the core dynamic of industrial production ... finding new ways to organise time... Matter is now assuming an equivalent status to time... the way we treat and use materials is the great challenge of the next industrial revolution.

The value of 'ecological accounting' tools is that they provide a start in bridging the gap between conventional economism and currently inaccessible ecological thinking. Birkin (1996), for example, develops the notion of 'Burden to Base' as a key relationship (Birkin, 1996, p.247-249):

...the word "capital" could be substituted by the word "burden"... This substitution acknowledges fundamental ecosystem dependence.... To support the burden, a base is required within the ecosystem... following on from the burden to base relationship, wealth can no longer just be mystically 'created', it will have to be appropriated...

Perhaps more practical (and indeed, gaining some currency), is the 'ecological footprint' (Wackernagel & Rees, 1996). The 'ecological footprint' uses the idea of an 'Earthshare' which is based on the total amount of productive land on the planet divided by the total global population. Our current average Earthshare is currently estimated to be about 1.9 hectares; representing the maximum ecological footprint allowance without depriving either future generations or those living in other parts of the world. Estimates of footprints for average citizens of America, Europe, etc, show they require vastly greater areas of land to support their lifestyles (and so have vastly greater footprints) than those in Asia and Africa. "Footprints" are useful indicators of inequality, and provide some idea of human "pressure" on nature, but they do not provide direct indicators about the (deteriorating) state of the environment.⁸ Generally, the idea is that reducing the size of footprints leads to improvements in environmental quality, or at the very least reduces the levels of degradation. Some adaptations using the footprint concept have occurred in New Zealand, where attempts are made by several organisations to calculate their "carbon footprints" using imputed carbon dioxide (CO₂) metrics for travel, electricity use, and so on.⁹

Related to footprints are the concepts of Material Inputs (incl. Energy) per Unit of Service (MIPS), and the "ecological rucksack" it gives rise to; Surface Area per Unit of Service (FIPS); and Eco-toxic exposure equivalent per Unit of Service (TOPS) (Factor-10, 1999). Associated with Schmidt-Bleek (1993) and the Factor-10 Club (see, www.factor10-institute.org), these concepts are intended to foster dematerialisation, and provide a way of understanding that harm to the environment is not just associated with pollution but also with resource extraction and resource productivity, since ultimately all resources end up as pollution and wastes. Moreover, decreases in material intensity per unit of GDP are ecologically irrelevant, since they do not account for the possible absolute increases in material flows from the ecosphere to the economy. As the Factor-10 report (1999, p. 9-10) notes, for example:

In Austria, the total national material input rose by 90% during the period 1960 to 1995, while the GDP increased by almost 200% during the same period of time. The apparent national material intensity decreased by 37%, while the natural resource flow from the ecosphere almost doubled. This is ecologically an obviously unsustainable situation, even though the numbers indicate otherwise.

"Ecological rucksacks" are calculated for end-use products, and seek to assess the amount of raw materials used (including energy) in producing, transporting, consuming, and finally disposing of an end product less the weight of that end product. So, for example, it has been calculated that 1kg of finished personal computer carries an ecological rucksack of 200 kg of materials. Rucksacks can also be calculated for base materials (e.g., metals, plastics, glass, cement). MIPS calculations seek to relate the material inputs to "service" outputs, and note improvements can come from either less material inputs or improved services from given

inputs. Related to MIPS and rucksacks, is the notion of “products as services”, and of divorcing “use” from “ownership” (see, www.product-life.org). The idea here is that if producers do not transfer ownership of final products, but merely rent them, they have continuing incentives to design products that minimise material and waste streams, are long lasting, and/or that can be easily recyclable. A famous instance of this kind of thinking is Interface Inc – a U.S. manufacturer that “leases” floor coverings (see, www.interfaceinc.com).

Like footprints, “success” comes from lowering MIPS and rucksacks, and the point about Factor-10 is that the goal is to lower these values by a factor of 10.

...if there is to be prosperity in the future, society must make its use of resources vastly more productive – deriving four, ten, or even a hundred times as much benefit from each unit of energy, water, materials, or anything else borrowed from the planet and consumed. (Hawken *et al.*, 2002, p.8)

Importantly, though, improvements in dematerialisation need to come at the level of economies and ultimately the planet, and not simply on the basis of individual products – a tenfold decrease in material inputs per computer is little use, if it coincides with a greater than tenfold increase in consumption of these products. And this problem of “rebound” or “boomerang” (see, for example, Factor 10, 1999; McDonough & Braungart, 1998; Hukkinen, 2003) tends to be encouraged by gains in resource productivity because the efficiency gains tend to create competitive advantages which in turn lead to greater investments and expansion.

Even avoiding the problems of rebound, some believe dematerialisation is not sufficient because while it reduces absolute levels of resource use, it still involves waste and toxic emissions, just *less* of them. For McDonough & Braungart (1998, p. 2) what is required is nothing short of *design* for the next industrial revolution, in which we learn to recognise that simply slowing down cradle-to-grave life cycles is not sufficient, and in which we seek to design products that work within cradle-to-cradle life cycles.

If people are to prosper within the natural world, all the products and materials manufactured by industry must after each useful life provide nourishment for something new. Since many of the things people make are not natural, they are not safe “food” for biological systems. Products composed of materials that do not biodegrade should be designed as technical nutrients that continually circulate within closed-loop industrial cycles – the technical metabolism.

“Success”, then, for McDonough & Braungart, is reached when we no longer produce any “unmarketables” – products that pose hazards, or cannot safely or economically be recycled, and when we keep separate “products of consumption” from “products of service”. The former are made from organic nutrients that can be returned to nature with no harm, while the latter are made from “technical nutrients” –designed to circulate in industrial cycles forever.

What emerges from this brief analysis of new concepts and tools is that current efforts of environmental or sustainability reporting are woefully inadequate means on which to form ideas about “success” in terms of the ecological logic needed to reorganise and ‘control’ economic activity. Long-term thinking, cumulative environmental impacts, multi-level analysis, and a proper understanding of the “economic organisation” as located within wider ecological and cultural systems, suggests we need radically different notions of “success” as an important step towards what we might term ‘control for sustainability’. In a transition to sustainability, if the end game is to remain unchanged, then the only means by which to seek decision processes, control systems, attitude and behaviour changes that promotes a transition to an ecologically sustainable society, is to seek changes that promote the decoupling of measures of success (growth, profits, etc.) from Earth’s limited physical energy and material

flows. Ultimately, however, humanity will need to realise that “success” is not just a case of making the transition to a solar economy, it is also in recognising that the natural cycles that the sun’s energy fuels are themselves limited in scale and speed (Sachs, 1999), and that all people have basic rights to meet their needs. Success is not just about technology, and efficiency, it is also about equity and sufficiency.

6. Conclusions

In the context of sustainability, as we understand the term, we have argued that the 3BL is a deeply problematic concept. While the 3BL framework in its various guises (the UNEP/SustainAbility framework, the GRI, the ACCA awards, and the ‘business case’ for reporting) has been instrumental in expanding and shaping reporting practice, it has also become dangerously confused with advancing a just and sustainable world. In making sense of sustainability, primarily through the 3BL, businesses and their associated institutions have limited their ideas to issues about themselves. Their conceptions are entity focused and reinforce notions that businesses must remain going-concerns (Ball & Milne, 2005; Milne, 1996; Gray & Milne 2002, 2004). That growing the business, making increased profits, and securing the financial viability of the business might come at the expense of the environment or social equity is largely avoided in the developments we have examined. Indeed, for many, making profits and securing the long-term viability of the business is seen as absolutely essential to achieving sustainable development. Through the practice of 3BL reporting many organizations seem to confuse narrow and often incomplete reporting with claims to be *reporting on being sustainable*, actually *being sustainable*, or more commonly, with claims to be *moving towards sustainability*. These claims, we contend, are further exacerbated through the institutional developments we have outlined in this paper, yet may amount to little more than soothing palliatives that, in fact, may be moving us towards greater levels of *un-sustainability*.

The initiatives reviewed in this paper inform the criticisms of reformism and calls for definitions of sustainability and sustainable development that we outlined in section two: that there are natural limits to the scale of economic and human development (e.g., Norton, 1989; Daly, 1973, 1992), that sustainability is essentially a systems level concept and not an organisational one (e.g., Dyllick & Hockerts, 2002; Gray & Milne, 2002; 2004, PCE, 2002), and that most of the way business is currently organised is along inherently unsustainable lines (e.g., reliant on fossil fuels, etc.) and needs drastically redesigning along ecological lines (McDonough & Braungart, 1998). Our current systems of financial and economic organisation lead us to try and relate all important matters to the level of current business organisations because it is here that power and decision making seem to lie. But nature and ecology know nothing of our businesses and institutions. If we are to return to some notion of harmony with our ecological roots we will need to reconceptualise our decision making, our institutions and our business organisations, and our notions of “success” along ecological lines. For certain, ecology will not reconfigure along our modern institutional lines.

What we fear, however, is the uptake of the 3BL more universally as it continues to be confused with sustainability. As the predominant set of guidelines, the GRI seems the obvious candidate to emerge and be backed by any firmer governmental policy on reporting. Yet the GRI with its attendant 3BL focus seems unlikely to promote the kind of ecological thinking and literacy, and so change, we see as so necessary. It is not that the GRI (and 3BL) does not promote improvements in business reporting and arguably behaviour, especially stakeholder involvement and accountability, it is that such initiatives fail to confront head on that which

UNEP/Sustainability recognised over a decade ago, namely: “some products, processes and even entire industries may prove to be unsustainable – even when run efficiently...” (1994 Report, p.20). Given their influence, this paper has singled out the UNEP/Sustainability benchmarking initiative to return to its original conceptions of sustainability, distance itself from the uncritical 3BL reporting model its report series (and now the GRI) has developed, and make real demands for business to re-frame unsustainable industry and business models. We also challenge those business schools and business leaders that have assumed a role in promoting the sustainable corporation to move away from ambiguous conceptions of sustainability, as manifest in 3BL reporting, and towards ecological literacy and a different generation of accounting tools and approaches.

Without such a shift, we see the GRI and 3BL taking root through reporting, institutional and perhaps ultimately legislative support, and with it coming a discourse and ideology that paradoxically seems likely to compel us “to adopt a narrow economic language, standard of judgement, and world view in approaching and utilising the earth” (Worster, 1995, p. 418; Levy, 1997). As McDonough & Braungart (1998) have noted, if all that sustainability means is eco-efficiency [and stakeholder engagement, and reporting on the 3BL], then there is a distinct danger that industrial capitalism will continue to finish off everything quietly, persistently, and completely. Contrary to popular belief, then, the 3BL may be better understood as an organisational and institutional barrier to developing ecological literacy and fuller take-up of sustainability.

Notes

¹ The reader is likely to be familiar with Thomas Malthus’ (1798) prediction that population growth would outstrip food production and lead to mass starvations, but is perhaps less familiar with William Jevons’ (1865) prediction, made during the height of the Industrial Revolution, that coal reserves would run out and lead to the demise of British industry.

² These are terms used by Dryzek (1997) to distinguish two main approaches to whether global limits exist and pose constraints for human development. It is, of course, an oversimplification, but it is not unusual to collapse such complexity into fewer categories or opposing binaries such as “exploitationists” “conservationists” and “preservationists” (Norton, 1991), “reformists” and “radicals” (Shrivastava, 1994), “ecocentrics” and “technocentrics” (O’Riordan, 1991; Pearce, 1993; Benton & Short, 1999).

³ Earlier “survivalist” literature emanated during the 1960s and 70s and included Carson (1962), Boulding (1966), Ehrlich (1968), Hardin (1968), Georgescu-Roegen (1971), Commoner (1972), Meadows *et al.* (1972), Goldsmith *The Ecologist* (1972), Ward & Dubos (1972), Daly (1973), and Schumacher (1973).

⁴ With respect to the laws of nature, Russell (1986, p.35-36) asks “Have we any reason, assuming they have always held in the past, to suppose that they will hold in the future?” His response is instructive. “It has been argued that we have reason to know that the future will resemble the past, because what was the future has constantly become the past, and has always been found to resemble the past, so that we really have experience of the future, namely of times which were formerly future, which we may call past futures. But such an argument really begs the very question at issue. We have experience of past futures, but not future futures, and the question is: Will future futures resemble past futures? This question is not to be answered by an argument which starts from past futures alone.” In fact, this question cannot be answered by reason or experience. It cannot be answered by observation because we cannot observe the future, and it cannot be answered logically because we cannot deductively move from a first premise that A and B have always been observed together to the conclusion that A and B have always been, are always, and always will be, observed together. As Russell (1986, p.38, emphasis in original) concludes, “Thus our inductive principle [of generalising from past events to future ones] is at any rate not capable of being *disproved* by an appeal to experience. The inductive principle, however, is equally incapable of being *proved* by an appeal to experience.”

⁵ Referring to the “tyranny of now” and the “tyranny of small decisions”, Odum (1982) and Ornstein & Ehrlich (1989), for example, have argued that the current crises we face are in part the result of creeping incrementalism and our reductionist tendencies to focus on individual short-term events and decisions, and to ignore the long-term and cumulative effects of our behaviour. Perhaps we are not capable of perceiving the long-term cumulative effects of our behaviour, a position Ornstein & Ehrlich liken to that of a frog slowly, but fatally, boiled in water, and perhaps we have set in train processes that are no longer reversible. Fatalism may result from not just a belief

that as a species we are simply not capable of understanding the complex processes we meddle with, and so are not capable of controlling our destructive tendencies in relation to our natural environment, but also from a belief that many of us are incapable of controlling or changing the behaviour of powerful others who continue to operate on the basis of Promethean optimism.

⁶ The 50 reporting ingredients were first introduced in *Coming Clean* (1993) and subsequently developed in the first of the series of UNEP/SustainAbility reports (1994), but were first used to rank companies only in the second of the UNEP/Sustainability survey series (1996).

⁷ This work, however, is arguably more to do with Forum than it is with CIMA, since it reports a full-cost accounting methodology developed in partnership with several UK companies by Forum.

⁸ The Best Foot Forward's (BFF, undated) analysis of the Isle of Wight's (UK) footprint, for example, estimates each islander consumes about 2.5 times the sustainable average Earthshare. It presents a detailed analysis of the 'supply-consumption-disposal' chain on the Island, and begins to bring an understanding of the collective impacts of the islanders' and their tourist visitors' material consumption, as well indicating some (albeit short-term and incrementalist) alternatives. It notes, for example, 13,000 of the 34,000 tonnes of milk produced are consumed locally on the Island. There is an additional 5,000 tonnes of local demand. This could be satisfied by island-produced milk rather than being imported, thus reducing the environmental impact of transporting this amount. This would reduce the Island's Footprint by 100 ha... (p.38)

⁹ See, for example, http://www.landcareresearch.co.nz/research/sustain_business/EBEX21

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