NEWS JOURNAL OF THE ASIA PACIFIC CENTRE FOR ENVIRONMENTAL ACCOUNTABILITY

VOLUME 7, NO. 1, MARCH 2001

Contents **Page No.**

Editorial 2

Feature Articles

Environmental Accounting within the Conventional Accounting Framework: A Critique 3
Sumit Lodhia

The BHP and OK Tedi Case, 1984-2000: Issues, Outcomes and Implications for Corporate Social Reporting 11
Brian Siang Peng Chu

Regional Adoption of ISO14000: A Question of Total Environmental Management 21
Lorne Cummings

APCEA Link with EMAN
Roger Burritt 25

Book Review 26

Regular Features

Environment Extra! 29

Published with the assistance of the Department of Accounting and Finance,
Macquarie University, Sydney, Australia

Sponsored by the New South Wales Division of CPA Australia

Copyright, March 2001
ISSN 1442-1224

EDITORIAL

Welcome to the first edition of the APCEA News Journal for 2001. Thank you to all the readers that have supported us over the last few years, in particular the generous sponsorship of the journal by the Australian Society of CPA's. Your commitment to the journal is greatly appreciated. Readers are reminded of our homepage at;

http://www.accg.mq.edu.au/apcea/index.html

In this edition, the first article by Sumit Lodhia analyses environmental accounting within the conventional accounting framework.

The second article by Brian Chu provides an extensive overview of a study on the environmental reporting practices of BHP. It is based on his Honours thesis at Macquarie University, and examines the extent to which environmental reporting has increased over the period relating to BHP's OK Tedi incident in Papua New Guinea.

The third article examines the extent to which ISO 14000 has been adopted by organisations operating within the Asian region. Finally, Roger Burritt provides an update on the recent formation of the Environmental Management Accounting Network – Asia Pacific.

A summary is provided of the recently released book; "Voluntary Environmental Agreements". As usual, our environmental extra section provides short information on recent environmental events.

This year's APCEA Journal will be a joint effort by Macquarie University (first two editions) and The Australian National University (second two editions). If any readers wish to contribute environment related articles or news, please feel free to contact me at:

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Articles should be submitted in word format as an email attachment, and can be up to 4000 words.

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ENVIRONMENTAL ACCOUNTING WITHIN THE CONVENTIONAL ACCOUNTING FRAMEWORK: A CRITIQUE

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The environmental accounting debate rose to prominence in the 1990s, culminating in tremendous academic research in this non-traditional phenomenon. Unfortunately, this has not been matched by developments in the mainstream accounting practice. Environmental accounting continues to be regarded as an alternative accounting thought and the involvement of accountants in environmental issues is often subject to scepticism (see for example, Bebbington et al., 1994, Gray et al., 1995a, Lodhia, 1998, 2000).

This paper seeks to identify the characteristics of the contemporary environmental accounting practice that have contributed to its inability to be established into the mainstream accounting agenda. It is suggested that for environmental accounting practices to succeed in providing accountability to the various stakeholders, the issues identified in this paper will need to be seriously looked at. This, in turn, would lead to improvements in contemporary practices and the quality of life for everyone.

Limitations of Mainstream Accounting in Handling Environmental Issues

Traditional accounting practices are centered primarily on profitability as the sole indicator of business performance. A business's success is judged by the profits it makes and the market value of its shares. The concentration is on capitalistic modes of production, and social and environmental responsibilities are often sacrificed. This has been enhanced by the academic curriculum emphasis on profits as the primary determinant of business success (Tinker, 1985). The capitalistic focus of conventional accounting is commonly referred to as the marginalist value theory (see Tinker, 1980, 1985, Tinker et al., 1991, Nandan, 1992, 1994).

Tinker (1985) is critical of the focus on profits as the sole criteria of business performance, stating that it neglects significant social issues. He also places the blame on generally accepted accounting principles for not adequately covering a growing number of social concerns, which have led to corporate scandals and environmental mismanagement. It is argued that the conventional accounting practice cannot balance the contrasting objectives of profitability and social responsibility. Tinker et al. (1991, p.39) support this further, stating that:

> "*a conventional understanding, based on marginalist precepts, is only a surface-level appreciation of the meaning of accounts, and that the marketplace is merely a facade where social protagonists meet to resolve their struggles over the distribution of wealth. Efficiency,*

productivity, and other global metrics are merely metaphysical artefacts promulgated by some adversaries to advance their claims."

A contradiction usually arises while trying to balance the objectives of profit making and social responsibility. Current environmental accounting practices are carried out within the conventional accounting framework. However, environmental accounting practices usually involve outlays by the organization with the intention of preserving environmental resources for future generations. The benefits of carrying out environmental accounting cannot be realized in the current period. This conflicts with the traditional accounting concept of Matching which states that expenses in the current period should be matched with the associated revenue for the period. Thus, environmental sensitivity by organizations seems contradictory to the traditional accounting viewpoints on profitability. Moreover, there is no regulation anywhere in the world to guide or control environmental accounting. This leads to reluctance on the part of the accounting profession to undertake environmental accounting.

Mainstream accounting also has a tendency to rely heavily on quantitative measures. The assumption is that such measures are objective. This is supported by Willis (1994, p.21):

"As far as the consideration of environmental costs and impacts is concerned, the conventional accounting model's fundamental shortcoming is that, being entity-centered, it deals with an entity's market-priced transactions within the conventional market-based economy; it has no means of valuing and recording any transaction for which the marketplace has not assigned a value (or for adjusting when there is a partial value)."

and Gray (1990b, p.382):

"*The basis of our accounting is book-keeping which is driven only by price transactions.*"

Environmental accounting measures are often subjective and could involve non-quantifiable information. There is subjectivity associated with environmental accounting mechanisms such as identifying environmental costs, estimating environmental benefits, accounting for environmental risk and contingencies, undertaking environmental audits and introducing eco-balance sheets. These subjective measures are problematic within the traditional accounting framework. The problem of ignoring subjective measurement by the conventional accounting practice is clearly highlighted by the McNamara Fallacy (see Gray et al., 1993, Nandan, 1994 for example):

"*The first step is to measure whatever can be easily measured. This is ok as far as it goes. The second step is to disregard that which can't be easily measured or give it an arbitrary quantitative value. This is artificial and misleading. The third step is to presume what can't be measured easily really isn't important. This is blindness. The fourth step is to say that what can't be measured really doesn't exist. This is suicide."*

The profitability motive and disregard for subjective values have seen accountants not featuring prominently in the environmental management strategies of organizations.

The Non-involvement of Accountants in Environmental Management

The literature on environmental accounting suggests that accountants should play a crucial role in environmental management in organizations. However, the contemporary environmental accounting practice suggests otherwise. There is currently very little involvement by accountants in environmental management in organizations (Gray et al. 1993, Bebbington et al., 1994, Deegan et al., 1995, Gray et al. 1995a, Frost and Wilmhurst, 1996, Collison, 1996, Wycherley, 1997, Wang et al. 1997, Shiraz, 1998, Guilding and Kirman, 1998, Lodhia, 2000). Accountants are not bringing about changes in organizational practices (Gray et al., 1995a) through utilization of their skills in the environmental management strategies of companies.

It has been suggested that accountants may not be qualified to handle environmental issues within the conventional accounting practice. The mainstream accounting education has focused on technicality and provided less attention to the consideration of the wider social and environmental factors impacting on the accounting practice (Tinker, 1985). Contemporary accounting educational programs have groomed accountants to focus on profit maximization and to treat environmental factors as another external cost to the organization. Their non-involvement in environmental matters is defended by stating that accountants are not environmentalists. The misconception among accountants is that environmentalists should handle environmental matters and record keeping should be left to the accountants.

Contemporary accountants fail to consider that accounting is more than just a technical phenomenon. Accounting encompasses the wider social, historical, cultural and political structures in society and it makes sense for accountants to be involved in social activities, especially environmental accounting. This could be achieved through the utilization of their traditional accounting skills. These skills could be pooled together with the skills of environmental experts to form a multi-disciplinary team of environmental management within an organization. This would encourage sustainable business practices by corporations.

The lack of involvement of accountants in environmental accounting can only be attributed to the internal operations of environmental management systems. Accountants are however taking the lead in the disclosure of environmental information in annual reports. In spite of this, environmental accounting practices are not perceived as neutral practices.

The Problematic Nature of Environmental Reporting

Current environmental accounting practices focus primarily on environmental reporting. Consideration of internal environmental accounting mechanisms is often neglected. An immense literature is devoted towards the reporting of environmental information in annual reports. On the other hand, fewer studies have concentrated on the actual evolution of environmental accounting systems in organizations, from the establishment of environmental policies to the reporting and evaluation of

environmental information. The idea behind this paper is that the desirability of environmental accounting practices cannot be appropriately measured by the number of lines attributed to environmental information in annual reports. This is due to the attempts by organizations to focus only on favorable events and use environmental disclosures as public relations exercises (Owen, 1992, 1993, Gray et al. 1993, Gray, 1994, Gray et al. 1995b, Deegan and Gordon 1996, Gallhofer and Haslam, 1996, Burritt and Welch, 1997a, 1997b, Tilt, 1997, Neu et al., 1998). As Neu et al. (1998, p.273) theorize,

> *"In essence, environmental disclosures seek to manage public impressions of organizational actions but not necessarily through the provision of false information. Rather, the disclosures are selective in that they attempt to shape the way important relevant publics know or feel about the corporation: by highlighting specific organizational actions from within the domain of action that are positive; by re-framing actions made visible by powerful external publics; and by ignoring actions made visible by less powerful external constituents.*"

It is argued that organizations use environmental accounting as a political gimmick - only good news disclosures are provided. A very "rosy" picture of the organization may be portrayed in terms of its social responsibility and awareness, when in fact, the organization may be constantly thriving in pursuit of profits. A possible explanation for such activities is that organizations may attempt to convert the positive image gained from undertaking environmental accounting into a favorable position in the stock market. It may be an attempt to influence capital markets (Mathews and Perera, 1996). Further research needs to be carried out to determine the exact relationship between recent environmental accounting disclosures and the stock price of organizations.

The current environmental reporting practice is therefore seen as a contradiction itself. Disclosures in annual reports are manipulated to provide a favorable impact of business operations. Tinker *et al*. (1991, p.50) assert that:

> *"annual reports and the financial statements they putatively represent, are inevitably ideological in that they unavoidably re-present reality from a particular point of view"*

while Gray et al. (1993, p. 257) state that voluntary disclosure:

> "*owes more to advertising, public relations and image construction than it does to information, accountability and transparency"*.

The reluctance of organizations to provide information on the negative aspects of its operations on the environment is due primarily to the voluntary nature of the practice itself.

Financial reporting practices are regulated through accounting standards but presently, there are no mandatory standards to guide the disclosure of environmental information in annual reports. Thus, these disclosures are often public relations exercises that attempt to improve the company's image. This is the deficiency inherent in environmental reporting practices - we cannot assume that environmental disclosures provide evidence of sustainable development by organizations

in the absence of related accounting standards. The problem with the manipulation of environmental reporting practices would continue as long as the practice remains voluntary. This often leads to patchy and inconsistent environmental disclosures.

Lack of Consistency and Uniformity in Environmental Accounting Practices

A common approach used in conventional accounting practices to analyze business performances is to carry out inter-company comparisons. Unfortunately, it is impossible to compare environmental related information across firms as there are no standards to bring about uniformity in environmental accounting practices. The subjectivity involved in such practices also contributes to the inconsistency in environmental accounting practices. There is in effect a lack of adequate benchmarks to evaluate the environmental performance of companies.

Summary and Conclusions

Figure 1 sums up the similarities and the divergence in the mainstream accounting and environmental accounting schools of thought. It argues that even though both mechanisms employ similar tools of internal management, reporting and auditing, differences in their goals, data and regulation have contributed to the contradictory nature of environmental accounting within the conventional accounting framework. If environmental accounting practices are to improve the quality of life for everyone on this planet, there is an urgent need for modifications to these. An analysis of the limitations of present practices would be the foremost step towards seeking to rectify the problematic nature of contemporary environmental accounting systems.

	Mainstream Accounting	***Environmental Accounting***
Goal	Profit maximization	Improve corporate environmental performance
Data	Primarily quantitative	Qualitative Limited quantitative
Internal mechanism	Management accounting	Environmental management
External mechanism	Financial Reporting	Environmental reporting
Regulated	Yes - through accounting standards and corporate legislation	No - but environmental legislation and standards (e.g. ISO 14000, EMS, etc) help
Auditing tool	Financial Auditing	Environmental Auditing

Figure 1: Mainstream Accounting and Environmental Accounting compared and contrasted

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THE BHP AND OK TEDI CASE, 1984-2000: ISSUES, OUTCOMES AND IMPLICATIONS FOR CORPORATE SOCIAL REPORTING

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1. INTRODUCTION

Research indicates that the amount of corporate social disclosures being voluntarily disclosed by corporations in corporate annual reports has increased significantly. Researchers have also considered why corporations are disclosing more voluntary corporate social reporting (CSR) information in these reports. Thus, it is logical to suggest that voluntary corporate social disclosures, financial or non-financial, would only be included if management deemed they were of some benefit to the organization.

1.1. Key Questions

This study examines the CSR practice of BHP Limited's operations at the Ok Tedi mine in PNG. The controversial nature of the Ok Tedi operations means that CSR may have played an important role in discharging (or otherwise) BHP's social and environmental accountabilities. In addressing the case study, three fundamental questions are investigated: where, how, and why did BHP disclose CSR information?

2. THE PURPOSE AND CONTRIBUTION OF THE STUDY

The potential importance of CSR practice in the context of major social and environmental incidents centres on the fact that organizations are likely to respond to external pressures or threats in ways that protect corporate interests and image. Therefore, CSR in this context is used as a means of reducing the negative effects of major incidents through the use of the annual report and other disclosure media.

2.1. The Context of CSR

Within Australia and the rest of the world, reporting about social and environmental issues in a company's annual report remains predominantly voluntary. As corporate impacts to the external environment become more prominent, the volume of voluntary disclosure related to that subject grows. The level of disclosure then declines again as companies perceives that the issue is attracting less widespread interest. Thus, this reactive and legitimating use of CSR is a seemingly inevitable consequence of voluntary reporting.

Today, businesses operate in a climate of intense public scrutiny from various stakeholder groups such as lobby groups, labour unions and governments. Consequently, managers have recognized the perception of congruency between organizational actions and the values of relevant publics as central to organizational survival. The continuing existence of organizations depends on obtaining and maintaining not only social approval (organizational legitimacy), but also system-wide legitimacy.

This study involves a detailed case study of CSR practice over a seventeen-year period. In order to examine CSR practice in a social, political and economic context, this study adopts two complementary theoretical perspective's to investigate why these disclosures were made—legitimacy theory (with a focus on micro/organizational legitimacy) and political economy theory (with a focus on macro/system-wide legitimacy). Legitimacy theory attempts to provide insights into CSR practice at the micro level in which a company may legitimise organizational activities by increasing the quantitative and varying the qualitative characteristics of corporate social disclosures.

On the other hand, political economy theory is used in conjunction with the micro-level legitimacy theory by attempting to describe the context in which organizations might need to engage in CSR to legitimise their activities. It is contended here that an essential problem in the literature arises from treating legitimacy theory and political economy theory as competing rather than complementary theories of CSR behaviour. The essential point made in this study is that the economic and financial domains cannot be studied in isolation from the political, social and institutional framework within which the economic and financial takes place.

2.2. Annual Reports as the Primary Source of Disclosure Media

Any reasonably sized company can employ various strategic disclosure media through which it discloses CSR information. In addition to annual reports, company and public relations brochures, employee newsletters, advertising and special reports are all-important sources of "strategic" information about companies. Each media source can be perceived to strategically target a specific or wider audience. But probably the most important channel is the company's annual report. This study, however, compares, contrasts and assesses CSR disclosures made through separate environment reports, greenhouse emission reports, other reports specific to the operation of Ok Tedi, together with the annual reports by BHP.

2.3. The Ok Tedi Case

The approach this study brings to the research of CSR utilizes an in-depth case study and historical review of BHP Ltd regarding its operations at Ok Tedi. In particular the events affecting the environment, which have occurred since 1984 as a consequence of BHP's operation in Ok Tedi, provide an impetus for investigating possible increases, together with the reasons for this increase in the levels of CSR disclosure and changes in the nature of that disclosure. Thus, the Ok Tedi case study provides a more comprehensive description of the role of accounting in an organizational and social, economic and political context. Furthermore, this study places BHP in the context within which corporate social reporting is used.

3. CSR THEORIES

3.1. Legitimacy Theory as an Explanatory Theory of CSR Disclosure

Micro/Firm-Specific Legitimacy

Organizations and their accounting systems ultimately operate in a social, economic and political context. Their continued existence, hence, depends on obtaining and maintaining social approval by ensuring that they operate within the bounds and norms of their respective societies. These bounds and

norms change across time, thereby requiring the organization to be responsive. Thus, organizations may face many threats to their legitimacy.

CSR can be seen as an important tool in corporate legitimation strategies, as it may be used in a number of ways to convince key stakeholders that the organization is fulfilling their expectation. These range from embracing a notion of accountability through to manipulation of public views. For example, the general tendency for CSR to be self-laudatory, may be explained as commensurate with a legitimation action on the part of the organization whereby the organization seeks to change the perceptions of the relevant publics without changing its actual behaviour.

3.2. Political Economy Theory as an Explanatory Theory of CSR Disclosure Micro/Firm-Specific Legitimacy

This approach seeks to understand and evaluate the functions of accounting within the context of economic, social and political environment in which the organization always operates, namely the macro context or system-wide legitimacy.

There are, however, two variants of political economy theory. Political economy can be viewed as "*bourgeois*" or as "*classical*". Adopting a bourgeois approach that *assumes* structural harmony within society would not be a realistic assumption when an in-depth study is concerned. This requires the introduction of wider, systematic factors into the interpretation and explanation of the CSR phenomenon. For the purposes of this study, in adopting a complementary perspective of legitimacy and political economy, it is necessary to consider a classical political economy as placing structural conflict, inequality and the role of the State in a more prominent position. Therefore, by adopting a classical political economy perspective, this study admits into the analysis an examination of how the organization's CSR practices interact with pressures of the social, political and economic systems that surround them (and the system as a whole).

4. RESEARCH METHOD

The use of content analysis facilitates the examination of legitimacy theory for CSR practice as the method describes what has happened in terms of the quantity and quality of CSR disclosures over the period. In addition, an association between the quantity of CSR disclosures during major environmental and social events might be indicative of supporting legitimacy theory.

Table 1 illustrates the content analysis categories used in the study.

Table 1: Content analysis categories used in this study		
Quantity of CSR disclosures		
Categories	Variable Captured	Purpose for Identifying
Themes	i. Environment ii. Energy iii. Human Resources iv. Community Involvement v. Others	Reporting to relevant publics ex ante
Quality of CSR disclosures		
Categories	Variable Captured	Purpose for Identifying
Quantification	• Quantified • Not quantified	Mode of substantiation
Timing	• Past • Present • Future	Proactive or reactive disclosure strategy
Type of news	• Good news • Bad news • Neutral news	Self-laudatory nature of the BHP corporate image
Source of disclosure media	• Annual reports • Environment & community reports • Greenhouse reports • Other reports	Strategic choice of disclosure media

On the other hand, adopting a classical political economy theory to understand CSR practice requires the analysis of the social, political and economic context in which CSR practice occurs. In order to analyze this overall context, historiography is used as it permits the contextualisation of the observable CSR practices derived from the content analysis. Furthermore, the context in which CSR practice is carried out can be compared with the quality of CSR disclosures such as news type, for example, reporting good news when negative organizational activities impact the environment. Thus, these methods seek to provide insights to CSR practice in a complementary way and seek to explain legitimacy and political economy theories.

Relevant information was obtained from public, archival sources in the form of newspapers and magazines, journals, mining and environmental publications. This was carried out by obtaining Ok Tedi-related BHP media press releases over the period of analysis. In addition, the Australian media articles were checked through the Australian Business Index (ABIX) database and those mentioning BHP and Ok Tedi for the same period were also obtained.

5. HISTORICAL CONTEXT

5.1. Background — The Tailings Dam Controversy

Since the inception of the project, the disposal of tailings has been a contentious issue between BHP, together with OTML, and the PNG government, in which BHP has consistently argued against a dam to contain the tailings.

A Series of Disasters: 1984-1993

Mining was permitted to commence in 1984 without a tailings dam having been constructed. Consequently, the tailings were, from the outset of mining, discharged directly into the Ok Tedi and Fly River system. In addition, the environmental impact in the river was compounded by the series of incidents involving cyanide that caused massive damage to aquatic flora and fauna.

The 1994-1995 Litigation Crisis

In 1994, the law firm of Slater and Gordon filed writs in the Supreme Court of Victoria against BHP and OTML, on behalf of PNG villagers. The largest compensatory suit in Australian history claim that damages could amount to A$4 billion. The case became well known in the media and BHP had to begin to explain their part in the case. Thus, the circumstance of this lawsuit was one of the "Australian giant" versus the traditional landowners.

The Compensation Process, 1996-1998

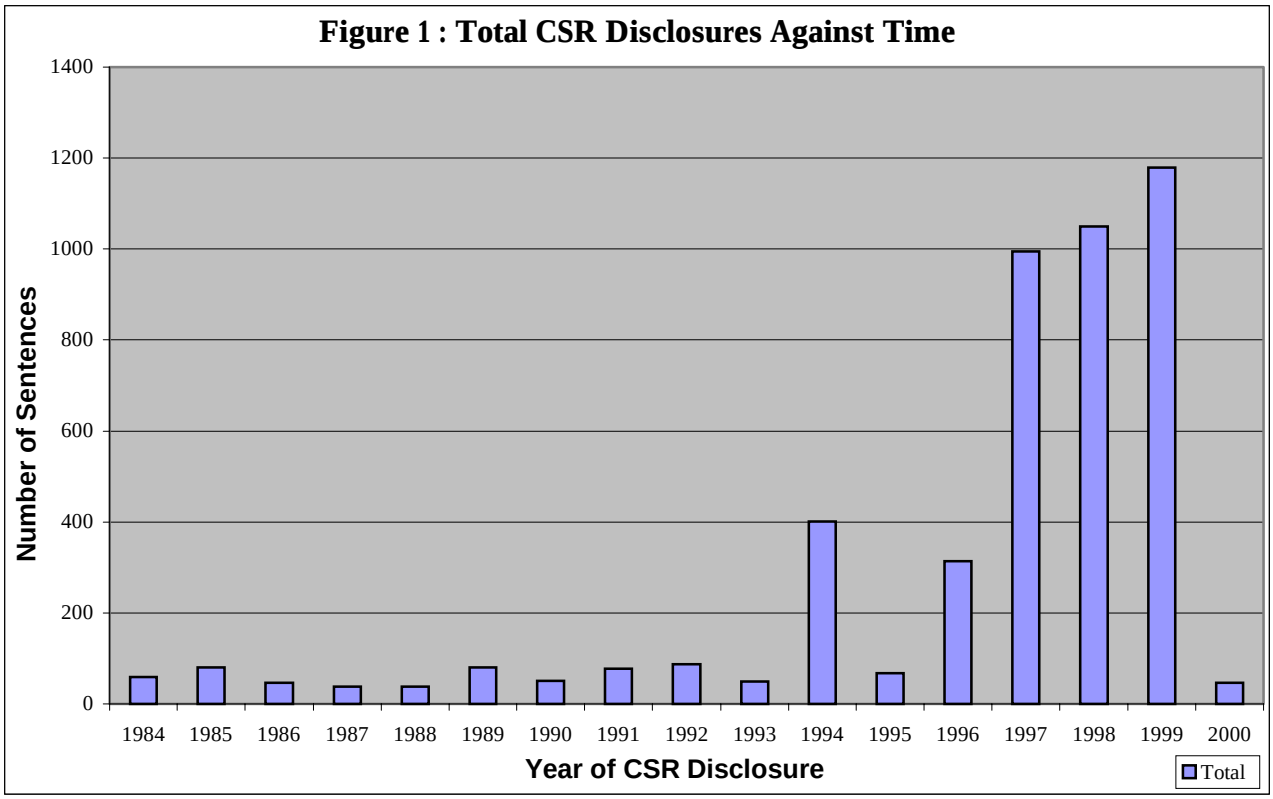
The litigation was settled in an out-of-court settlement in 1996. Under the agreement, BHP would stop dumping tailings from the mine into the Ok Tedi and Fly River system.

A New Round of Crisis, 1999-2000

The Mine Waste Management Project Risk Assessment was released by OTML in August 1999. This report has confirmed that the mine will remain an environmental disaster no matter what action is taken. In March 2000, a World Bank report recommended that Ok Tedi be shut down to prevent further environmental damage downstream of the mine. The World Bank has expressed concern that neither the PNG government nor BHP has acted quickly enough to tackle the Ok Tedi issue. In April 2000, PNG landowners launched new legal action against BHP seeking unspecified damages for harm flowing from the Ok Tedi mining operations.

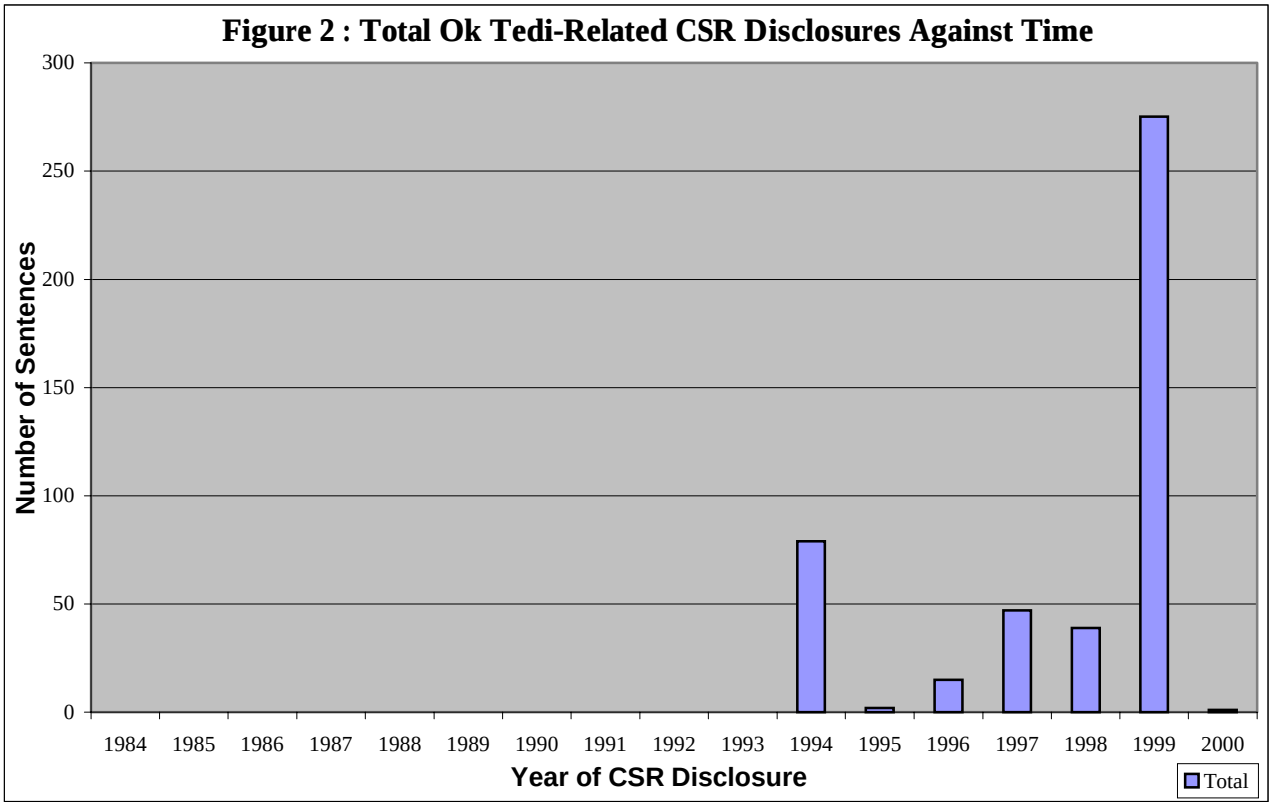
Under these circumstances, organizational legitimacy and system-wide legitimacy can be perceived to be threatened and CSR may be an avenue to re-establish legitimacy. It is against this background that BHP engaged in CSR disclosures.

BHP Disclosure Results



Figures 1 reflect total CSR disclosures over time. It shows the general increase in the total CSR disclosures; however, the periods from 1994 to 1999 show significantly higher increases. In addition, the quantity of disclosures of during the above period is striking in Figure 6.1, and suggests strongly the presence of some factors that may have resulted BHP in disclosing more CSR information.

Figure 2 shows total CSR disclosures regarding Ok Tedi over time. No prior reference of the Ok Tedi issue is mentioned before 1994. However, post-1993 indicates a period of significant increases in Ok Tedi related disclosures especially during the years 1994 and 1999. These disclosures might be resultant from significant events during mining operations in Ok Tedi.



6. ANALYSIS OF FINDINGS AND MAJOR IMPLICATIONS

The analysis of BHP's CSR practice indicates that there exists a power differential between BHP, the PNG government and the PNG landowners. This is evident in no reference being made regarding the Ok Tedi case prior to the lawsuit. The year of the lawsuit provided BHP with desire and reflects a change in BHP's quantity and quality of CSR disclosure. The main finding is that BHP's reporting strategy is consistent with legitimacy and political economy theories. Furthermore, the company's legitimation strategies are consistent with Lindblom's (1994) approach in seeking to legitimise or attempt to be accountable for their activities.

7. SUMMARY AND CONCLUSIONS

In the BHP and Ok Tedi case, the means (where) of disclosing CSR information has shifted from the traditional reporting medium (the annual report) towards other more strategic disclosure media (separate reports). There, however, might be several plausible reasons for this shift. Firstly, annual reports might have a limited audience particularly when environmental and social issues are discussed.

Secondly, these strategic disclosure media could be used, arguably, as a tool for targeting the relevant publics.

Thirdly, there is a greater scope in which environmental and social issues could be discussed through separate environment reports or, in this case, Ok Tedi-related

reports. Furthermore, this shift might also be due BHP's desire to recognise social responsibility, or alternatively to 'mystify' societal opinion as indicated by some of the company's strategic disclosure media.

The question arises of how BHP's strategic choice of disclosure media can affect stakeholder perception of organizational behaviour. This has to be considered in light of the quantitative and qualitative characteristics of CSR disclosures that are important in assessing the overall value of BHP's CSR practice. Increased quantity of CSR disclosure can be recognition of wider accountabilities or responses to perceived threats to organizational legitimacy (then this would not be voluntary CSR).

The qualitative characteristics of BHP's CSR disclosures provide an additional dimension to the nature of what is actually disclosed. The dominant characteristics of qualitative CSR disclosures indicate a primary focus on:

- Not quantified disclosures. This trend in BHP's reporting strategy does not seem surprising, as there are immense difficulties in quantifying such costs and benefits, for example, what amount can be placed on the environmental and social damage BHP has caused the PNG landowners and the environment.
- Present issues that concern the company, or the external environment. BHP's reporting strategy appears to be a logical move in that companies are more reactive towards societal or organizational needs or developments.
- Good news. BHP's reporting strategy is consistent with prior studies in that companies are self-laudatory. The fact that companies might be self-laudatory does not provide much insight to why only good news is disclosed.

The important point to note is that the quantity and quality of CSR disclosures are complementary. However, they should also be analysed with regards to why BHP discloses such information in the first place.

The analysis of both quantity and quality of CSR disclosure illustrates the legitimation approaches that BHP might adopt when legitimacy is threatened. Four broad legitimation strategies to maintaining organizational and/or system-wide legitimacy are possible. Some of these legitimation strategies were examined and have been found that BHP mostly seeks to maintain organizational legitimacy by managing societal opinions (manipulation or deflecting negative events) by disclosing more good news. In some cases, BHP was actually trying to inform its relevant publics about intentions of the company to enhance its social performance when there was good news to report.

In attempting to synthesize an explanation of CSR changes in the 17-year overview of BHP's mining operations in Ok Tedi, there are two key observations to be made.
Firstly, the overall upward trend over the period from 1994 to 1999 is consistent with a legitimacy understanding of CSR as the items addressed in the disclosures are of concern to the relevant publics. During this period, the company expanded its definition of stakeholders to include environmental groups, the PNG landowners, the PNG government and the public due to the focus on environment and community disclosures. In addition, over time, the increased discussion and revelation of BHP's attempts to disregard the environment, the PNG landowners and government became a significant part of the disclosure and was produced on a timelier basis.

Secondly, from a political economy point of view, the study of BHP and Ok Tedi illustrates the interplay between corporate activity, public opinion, welfare of traditional landowners, and government intervention. The PNG government's economic dependence on the Ok Tedi project resulted in the lack of regulation in a relationship whereby BHP had more power to exploit CSR. Therefore, BHP used CSR disclosures in order to influence social norms or perceptions and to influence the distribution of wealth and power.

In conclusion, it would be inadequate to assume structural harmony and analyse CSR phenomena in isolation from the overall context within which it ultimately exists. The social, economic, political and historical environment of Ok Tedi provides a more contextualized picture of BHP's CSR practice. It appears to be necessary to focus on this overall context in order to provide a more comprehensive picture of CSR practice. Therefore, the study has a stronger conclusion for BHP's CSR reporting strategy in relation to the BHP and Ok Tedi case.

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REGIONAL ADOPTION OF ISO14000: A QUESTION OF TOTAL ENVIRONMENTAL MANAGEMENT

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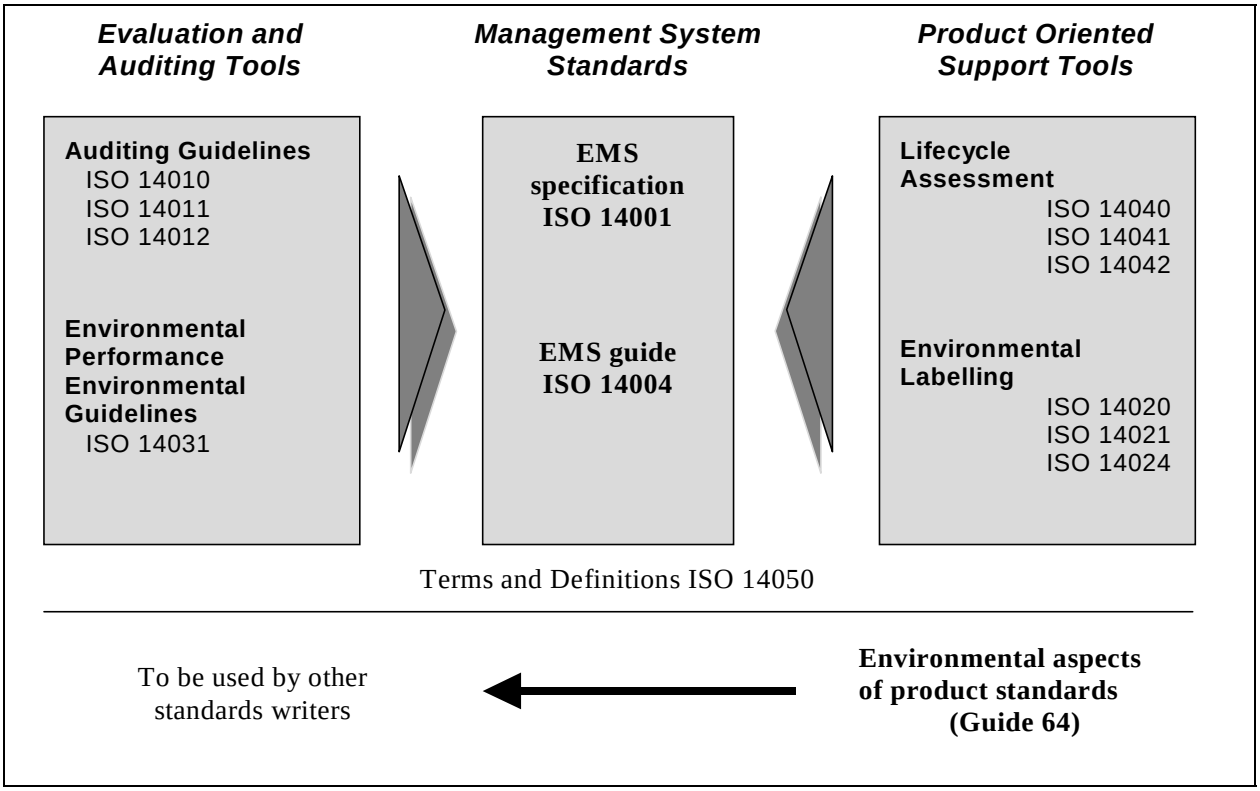
The five ISO 14000 series of standards on environmental management has received much publicity as a means by which to improve organisational environmental management since its inception in September of 1996. The foundations for the ISO 14000 series were laid at the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, when it was decided that the international business community would develop international environmental standards to ensure that companies operating globally could do so with a common set of benchmarks based on environmental quality.

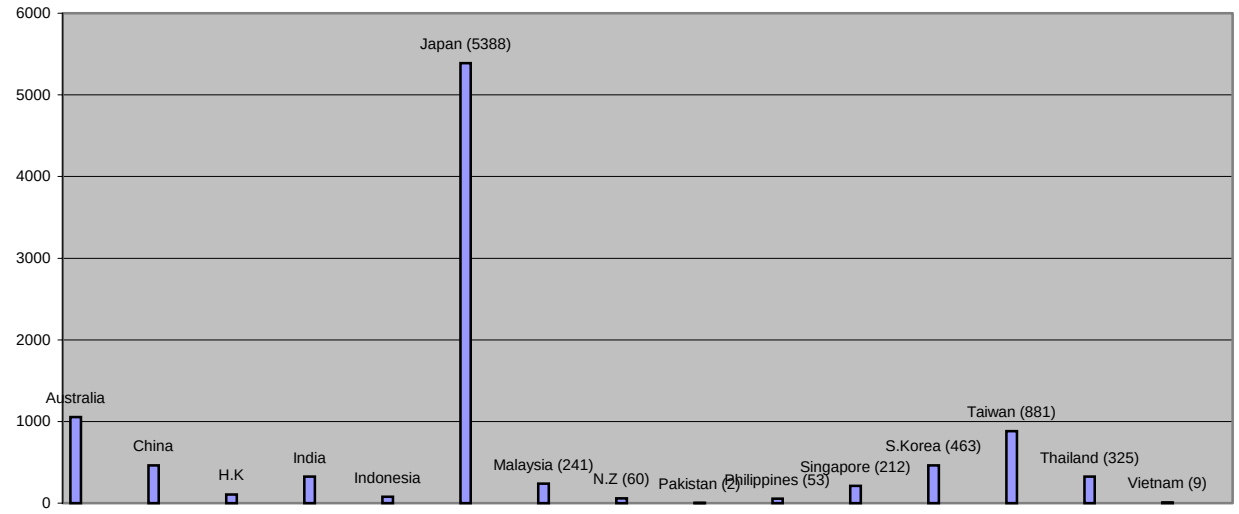
As Figure 1 indicates, the standards range from technical requirements on auditing guidelines, environmental performance guidelines, to life cycle assessment and environmental labelling.

Figure 1: The Structure of the ISO14000 Series of Standards (Source: Hortensius and Barthel, 1997)



However recent statistics indicate that whilst ISO 14000 is being widely adopted as a basis for environmental standard in many European and North American countries, there exist large disparities with respect to ISO 14000 certification across Asia. As Table 1 demonstrates, within the Asian region, Japan leads in the adoption of the standards, followed by Australia and Taiwan. However developing countries such as Indonesia (77), the Philippines (53) and Vietnam (9), lag far behind with respect to ISO 14000 certification. Furthermore, countries such as Cambodia and Laos have not yet recorded certification for any organisations.

Table 1: The Number of ISO14001 Registrations by Country (as at Jan 2001)



Source: ISO World (http://www.ecology.or.jp/isoworld/english/analy14k.htm), March 22, 2001.

A report by the Canadian based journal "Consensus" into Japan's adoption of ISO 14000 has indicated that whilst the manufacturing sector is the largest grouping that has adopted the standard to date, there have been a wide cross-section of organisations that have achieved ISO 14000 status. These have ranged from supermarkets, universities, banks, trading houses and governments at the local level.

Furthermore, apart from improving environmental performance and enhancing public image, distinctive reasons for the wide adoption of ISO 14000 in Japan has been the need to avoid the mistakes of ISO 9000. Japan's reluctance to embrace the earlier ISO 9000 series when it was released, due primarily to the faith in their own quality control systems, led many organisations within the European Union to mandate supplier compliance with ISO 9000. As such, Japan was caught unaware and failed to fulfil EU requirements for compliance status on many contracts.

Similar requirements are now being applied to the automotive industry. Both The Ford Motor Company and General Motors have announced that they will require all of their

suppliers to be certified to the ISO 14001 Standard by July 1, 2003 and December 31, 2002 respectively. In 1998, Ford became the first automaker to have all its existing plants certified to ISO 14001.

Mandatory ISO14000 compliance provisions in contracts can result in a competitive disadvantage for supplier organisations that are not accredited. Given that organisations in developing countries are less likely to have ISO14000 compliance than organisations in developed countries, this places them at a distinct disadvantage with respect to International trade. With an increasing focus on industrial production being shifted from high labour cost developed countries to countries with low cost with respect to materials, labour and overhead, there is an ever increasing pressure on developing economies to embrace quality standards. Absence of standards effectively results in *de facto* trade barriers being imposed, based on quality as distinct from industry protection that has been the source of trade barriers in the past.

China's expected entry into the World Trade Organisation in the near future will inevitably lead to greater competition for Chinese organisations at the international level. Domestically owned Chinese firms are already feeling the pressure to enhance their competitive edge by upgrading their products to reach global standards. China's State Environmental Protection Administration (SEPA) is currently in the process of establishing ISO14000 State demonstration zones, which aim to ensure that companies within the industrial zone area, are certified as ISO14000 compliant. To date there are two such zones in China. However China has been slow in adopting ISO 14000. Research has indicated that among the 70 firms in the Hangzhou Economic and Technological Development Zone in Zhejiang Province, more than half of those have obtained the ISO9000 certificates, whereas only three of those have passed the ISO14000 certification. Those three were foreign-funded enterprises. This is similar to Thailand in that of the 270 factories that have attained ISO 14000 status, nearly all of them were owned by multinationals.

In addition to the slow rate of compliance with ISO 14000, there are questions as to the credibility of the certification infrastructure. Although some developing economies have or are in the process of developing national certification schemes for ISO 14000, other countries do not have them, or have locally issued certificates that have not been subject to official 'licensing' requirements. There has therefore been an increasing pressure for less developed economies to have certificates awarded by international certification organisations. Davy (1997, p.178) states that in India for example, approximately 60% of ISO 9000 certificates were awarded by international certification organisations.

The aim of the ISO 14000 series is to unify environmental management standards in various countries, improve both the internal and external competitiveness of organisations who have adapted it, and attract funds to local industries. It is important that companies, and especially locally owned companies within the region, firmly embrace environmental standards as a means by which to improve not only their internal operational processes, but also their image in an increasingly globalised environment. Finally, Governments need to provide the necessary supportive frameworks to facilitate guidance to local companies. These include funding for awareness campaigns, training workshops, and industry support. Organisations that do

not achieve accreditation may miss out on potentially lucrative commercial opportunities, which in turn effects national economic development.

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APCEA LINK WITH EMAN

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The area of environmental accounting received a boost recently with the formation of the 'Environmental Management Accounting Network – Asia Pacific' (EMAN – AP). The new network organization was established by a group of interested parties at the World Bank Environmental Forum, held in Cheju, South Korea between 7- 9 February 2001. Roger Burritt (APCEA – ANU) attended the Forum, presenting a paper (with Stefan Schaltegger and Tobias Hahn (Germany)) exploring the foundations environmental management accounting.

Roger is a member of the EMAN – AP Steering Committee. The Committee is chaired by Professor Byung-Wook Lee (Director of the Environmental Management Center, POSCO Research Institute, Seoul, Korea). Other members include Professor Katsushiko Kokubu, Kobe University, and Ms Maria Fatima Reyes, Chair of the Environmental Cost Accounting Committee, Philippines Institute of Certified Public Accountants.

The specific objectives of EMAN – AP have yet to be fully determined, and will be considered at a meeting of the Committee to be held in Tokyo, early in June 2001. However, it was agreed that the Network will be concerned with:
Corporate Environmental Management Accounting; Environmental Performance Indicators; and Environmental Reporting and Disclosure.

In addition, activities are expected to include: An annual seminar / workshop – the inaugural workshop to be held in late September, early October 2001, in the Kansai District in Japan;
Close communications with the EU (through EMAN EU) and North America; and
Co-operative projects between members.

EMAN-AP is anticipating membership will come from the Asia Pacific region and it has anticipated, initially, around 13 member countries including, in addition to Australia and New Zealand: Japan, South Korea, the Philippines, China, Indonesia, Taiwan, Thailand, Singapore, Hong Kong, Vietnam and India.

Functions of EMAN – AP will be funded for the first two years by the members from Japan and Korea. Future funding possibilities may include approaches to groups such as the Asian Development Bank and USA EPA.

Members of APCEA interested in learning about EMAN-AP activities should contact Professor Byung-Wook Lee at bwlee@mail.posri.re.kr (telephone 82 2 3457 8131, or fax 82 2 3457 8040).

NEW BOOK REVIEWS

Voluntary Environmental Agreements: Process, Practice and Future Use

Contributing Editor: Patrick ten Brink, ECOTEC Research & Consulting Ltd

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Published by Greenleaf Publishing, Sept 2001

424pp: 156 x 234mm
Hardback: ISBN 1 874719 41 1
£40.00 US$75

Voluntary Environmental Agreements (VEAs)—generally agreements between government and business—have been regarded by many as a key new instrument for meeting environmental objectives in a flexible manner. Their performance to date has, however, also led to considerable criticism, with several parties arguing that they are methods for avoiding real action, which goes beyond "business-as-usual". Is either of these positions justified?

The aim of this book is to highlight and learn the lessons from existing experience, looking not just at results, but also at specific elements of agreements and also at the process of the agreement itself. Lessons are drawn from experience from across the world, covering the full range of environmental challenges, and from the perspective of key stakeholder groups. Importantly, the book also presents tools for assessing and improving existing agreements and includes recommendations and guidelines for future agreements in key areas such as climate change.

The overall view of the book is that there is a real potential for the future use of VEAs as part of the policy mix and as a tool for sharing the responsibility for meeting environmental objectives. For the agreements to play this role, however, significant steps are needed to ensure that they are effective, efficient, equitable and appropriately linked to a portfolio of other instruments.

The book is split into four sections. First, existing agreements, their development and efficacy are considered; second, the prospects for voluntary agreements in developing and transitional economies are discussed; third, a range of authors examine the role of VEAs as part of the policy mix to combat climate change; and, finally, the book concludes with an examination of how new tools for evaluating and improving VEAs could be utilised in the future.

Voluntary Environmental Agreements will be of interest not only to academics, governments and businesses wishing to understand this specific instrument, but also to those already implementing or considering applying VEAs to meet their environmental objectives.

Table of Contents

Introduction: Patrick ten Brink

Part 1: Process, Practice and Stakeholder Experience

Ch 1: Voluntary Environmental Initiatives and Sustainable Industry: Bruce Paton, University of California, USA.

Ch 2: Corporate incentives for participation in Voluntary Environmental Agreements: Electric Utilities and the Climate Challenge Program, Panagiotis Karamanos, Duke University, USA.

Ch 3: Co-operative Environmental Solutions: Acquiring Competence for Multi-Stakeholder Partnerships: Ken Sexton, Barbara Scott Murdock, and Alfred A. Marcus, University of Minnesota, USA.

Ch 4: Legitimacy, Efficacy and Efficiency: Factors Affecting Public Participation in EAs in British Columbia, Canada, Michael Mascarenhas, Michigan State University, USA.

Ch 5: Conflict or collaboration? New Zealand Forest Accord, Diane Menzies, Menzies Environmental Ltd., New Zealand.

Ch 6: Successful Application of Environmental Agreements in Local Communities: Perspectives from EPCAs in Japan, Rie Tsutsumi, University of Cambridge.

Ch 7: Chemical Industry in Germany - Recent Developments of the 1987 Chemical Industries Social Partners' Declaration on Environmental Protection, Dr. Bernd Heins & Laurent Lüttge MLE, German Trade Union on Mining, Chemistry and Energy, Germany.

Ch 8: New Trade Union Role in EAs: A Driving Force for Sustainable Development, Per Erik Boivie, Sweden.

Ch 9: Will Voluntary Agreements at the EU level deliver on environmental objectives, Volpi and Singer, WWF, Belgium.

Part 2 New Areas for VEAs ?: Developing Countries and Transition Economies

Ch 10: A Role for Negotiated Agreements in Developing Countries? Jonathon Hanks, University of Lund, Sweden.

Ch 11: A National Tripartite Agreement on Benzene in Brazil, Nilton Freitas and Winston Gereluk, ICFTU.

Ch 12: Environmental Agreements as Appropriate long-term Measures, Dr Nur Masripatin, Ministry of Agriculture and Forestry, Indonesia.

Ch 13: Negotiated Voluntary Environmental Agreements: Cases in the Czech Republic, Antonin Dvorak, Ales Lisa, Petr Sauer, University of Economics, Prague.

Ch 14: Navigating Toward a Hungarian Packaging Waste Management Solution, Dinah Koehler, Harvard University.

Ch 15: Conditions for Environmental Agreements in the Ukraine, Oleksandr Stegniy, National Academy of Sciences, Ukraine.

Ch 16: Step by Step Procedure for Preparing, Concluding and Evaluating Vas, Petr Sauer, Jaromir Kovar, Petr Fiala, Petra

Holcova, Ales Lisa, Antonin Dvorak, University of Economics, Prague.

Part 3: Can Voluntary Agreements Help Address Climate Change?

Ch 17: Australian Greenhouse Challenge Program – A perspective from a participating university, Paul Osmond, University of New South Wales, Australia.

Ch 18: Application of Effectiveness Analysis – The Case of Greenhouse Gas Emissions Reduction: The Australian Greenhouse Challenge, Roger L Burritt, The Australian National University.

Ch 19: VAs - Key to higher energy efficiency in industry? Signe Krarup, AKF Denmark and Stephan Ramesohl, the Wuppertal Institute, Germany.

Ch 20: Environmental Agreements in Climate Politics, Asbjorn Torvanger and Tora Skodvin, Centre for International Climate and Environmental Research, Oslo, Norway.

Ch 21: Negotiated Environmental Agreements and CO2 Emissions Trading, Johan Albrecht and Delphine François, Ghent University (CEEM), Belgium.

Ch 22: VAs - an effective tool for enhancing organisational learning and improving climate policy-making? Stephan Ramesohl and Kora Kristof, The Wuppertal Institute, Germany.

Part 4: Future Use: Tools For Developing Agreements

Ch 23: Voluntary Agreements: Effectiveness analysis – Tools, Guidelines and Checklist, Roger Burritt, The Australian National University.

Ch 24: Assessing the Performance of Negotiated Environmental Agreements in the Netherlands, Ellis Immerzeel, CSTM, University of Twente, The Netherlands.

Ch 25: Table of Performance Factors for Coregulation, Manuel M. Cabuguiera, Universidade Portucalense, Portugal.

Ch 26: The EIA Public Enquiry Procedure as a Model for Public Participation in Environmental Agreements, Patricia Bailey, European University Institute, Florence, Italy.

Ch 27: Monitoring EAs –A multi-level conformity approach - Sustainable Water Management in the Twente Region, Johan Woltjer, CSTM, University of Twente, The Netherlands.

Ch 28: Monitoring mechanisms for efficient EAs, Patrick ten Brink and Marina Morere, ECOTEC Research and Consulting Ltd.

Ch 29: Voluntary Environmental Agreements between private and public law, Bent Ole Mortgenson¸ University of Southern Denmark.

Ch 30: The Optimal Policy Mix: Matching Ends and Means in Environmental Policy Making, Yachnin B, Gagnon N, Guthrie B, and A. Howatson, The Conference Board of Canada.

Voluntary Environmental Agreements is available to reserve online at a 10% pre-publication discount. For more information, please point your browsers to: http://www.greenleaf-publishing.com, or contact sales@greenleaf-publishing.com

ENVIRONMENT EXTRA!

Japanese purchase Australian Carbon Credits

Tomen Corp and Chubu Electric Power Co Inc, two large Japanese power utilities have announced the purchase of carbon credits that allow the right to release 2,000 tonnes of carbon dioxide. The purchase was from Australia's largest producer of electricity, Macquarie Generation.

The deal represents the first agreement at an international level on emissions trading. In Australia, the right to emit CO2 can be traded for approximately US$2 to US$3 per tonne. This mechanism currently does not exist domestically in Japan.

Trading in CO2 emission rights is one way of achieving the required 5.2% reduction in global greenhouse gases by 2001, as set down by the UN-sanctioned Kyoto Protocol in 1997.

Certain non-profit organisations have also argued that in addition to emissions trading, organisations also need to seek ways in which to reduce reliance on fossil based fuels and promote alternative energy sources such as solar and wind power.

U.S. Abandons Kyoto Treaty

The Bush Administration has recently announced the abandonment of its commitment to the Kyoto Treaty. Reasons given include the differences in compliance factors between developed and developing countries, in particular the exemptions granted to developing countries with respect to emissions levels. Under the international treaty, industrialised countries including Australia, would be held to stricter standards on the emission of greenhouse gasses than developing nations. The United States currently emits 30% of the world's carbon dioxide. Australia sought to change the agreement last year by seeking to include vegetation such as salt-bush (which is planted to alleviate salinity) and non-domestic exotic plant species into the equation, which attracted criticism from EU states and NGO's.

The recent move by the U.S. has been widely condemned by the international community given the time and effort that had gone into successfully negotiating the treaty four years ago, and signals a shift in policy from the previous Clinton Administration. There are now fears that the withdrawal of US support could lead to the collapse of the treaty altogether.

Environmental Reporting Awards for India

The Association of Chartered Certified Accountants (ACCA) in the U.K, has announced that they will be introducing Environmental Reporting Awards in India, along the lines of that already in place in Europe. The awards identify and reward innovative attempts to communicate corporate environmental performance. The awards are based on criteria set down by the ACCA, including environmental, social and ethical criteria, in both descriptive and financial format.

Environmental Management Strong in Japan

A survey by the Japanese based Nikkei Weekly Newspaper, has reported that nearly 66% of manufacturers have already introduced environment friendly management systems.

The survey also found that 62.8% have adopted such systems at principal domestic manufacturing facilities and 16.5% have instituted them at their headquarters. Furthermore 22.3% of manufacturers have already adopted "green" reports to reflect environmental protection efforts on firms' books, and another 32.9% were making preparations to do so. In a specific case, NEC Corporation reported that it quantitatively calculated the environmental impact caused by each division and the cost of load reduction, based on its own computational methods. The company identified that it had spent more than 17.7 billion yen on environmental protection, with the semiconductor and electronic appliance division accounting for 8.1 billion yen of the total, and 1.2 billion yen for the treatment of industrial waste.

New Zealand to Financially Support Environmental Groups

The New Zealand Government has recently announced a $2.3 million package for environmental initiatives, including financial help for non-government groups fighting cases in the Environment Court, under the Resource Management Act. The objective of the funding was to ensure that case law developed around the environmental aspects of the Act, given that in most cases community and other non-government groups did not have the necessary resources, when pitted against developers, to fight such cases in court.

The package includes funding for environmental legal aid, environmental centres, a pesticide reduction strategy, and the setting up of national environmental accounting from 2004.