



Inquiry into Sustainability Reporting in the New South Wales Public Sector: Submission to the Legislative Assembly Public Accounts Committee

by

Richard (Dick) Osborn, Principal, Green Measures

1. Background and Experience

1.1 The author provides consultancy services on design, diffusion, and adoption of innovations in sustainability accounting. He participates by invitation in an Expert Working Group on *Improving the Role of Governments in Promoting Environmental Management Accounting* (hereafter UN EMA Group), conducted under the auspices of the Division for Sustainable Development within the UN's Department of Economic and Social Affairs. He has done so since the Group's formation in 1999. He contributes regularly to research conferences of the European Chapter of the Environmental Management Accounting Network (EMAN); and is a leader in the *Towards Accountable and Sustainable Communities* (TASC) Project conducted through the University of Southern Queensland's Office of Research and Higher Degrees. He is a member of the Environment Institute of Australia and New Zealand; also holding qualifications in agriculture, economics, and environmental science.

1.2 Prior to establishing Green Measures, the author held research positions in the Queensland Department of Primary Industries, Griffith University, CSIRO's Division of Land Use Research, and the University of Canberra. He was Senior Policy Analyst within the Australian Local Government Association from 1982 to 1992. During that time he engaged in many key intergovernmental initiatives on sustainable development at both national and international levels. At national levels these included attempts to implement the National Conservation Strategy for Australia (1983); the drafting of the Intergovernmental Agreement on the Environment (1992), and of the National Strategy for Ecologically Sustainable Development (1992). At international level these included contributing to formation of the International Council for Local Environmental Initiatives, combined with policy advice to that institution from his global review of local government roles in soil conservation (1990).

2. This Submission within the Inquiry's Terms of Reference

2.1 This submission offers some insights into processes relevant to section 3 (a) of this Inquiry's Terms of Reference: *Consider sustainability reporting initiatives within the public sector in Australia and in international jurisdictions.* Broadly, the processes now in play signal major shifts in sustainability reporting and in accounting practice. Key stakeholders are promoting change away from widespread experimentation by governing bodies and their independent choice of indicators. The many public and private bodies engaged in managing transition to sustainability are encouraged instead to inform decision-making by using elements from the System for Integrated Environmental and Economic Accounting (SEEA-2003), and from the System of National Accounts (SNA-1993).

2.2 The shift within international arrangements towards using elements of SEEA-2003 and SNA-1993 for informing decisions of sub-national governments and private sector entities is driven by three major needs. These are for:

- Consistent, credible, and comparable measures;
- Vertical integration of policies and instruments used by governing bodies; and
- More effective policies for engaging businesses in the transition to sustainability.

2.3 This submission illustrates each of these needs in the next three sections (3-5). It concludes with a final section (6) describing how those needs are being met in New South Wales through collaboration with the Eurobodalla Shire Council, with other members of the Southern Councils Group, and with the Southern Rivers CMA. The University of Southern Queensland's TASC Project is designed to build international developments in environmental and sustainability accounting and reporting into managing sustainability transition at local community scale. It does so primarily by a process of grassroots innovation. Ideas on informing and managing transition to sustainability are developed first with the Council and community representatives of Eurobodalla Shire. They are then being tested and adapted through innovation clusters along the NSW South Coast, and in Victoria's northwest. Results from the TASC



Project are also disseminated back to the international community through progress reports and research proposals to the UN EMA Group and to other institutional arrangements.

3. Need for consistent, credible, and comparable measures.

3.1 The emergence of performance indicators; their combination into tools such as the Balanced Scorecard, and their application to informing decisions, reflect two drivers for change:

- Financial measures, and conventions of accounting practice built up over many centuries, are now accepted as insufficient to inform decisions where complexity, risk, and intangibles are commonplace; and
- Advances in communication and information technologies offer opportunities in developing and adopting decision-support tools to deal with such difficulties.

3.2 These and other drivers have led to widespread proliferation of sustainability indicators. For example, the International Institute for Sustainable Development encourages practitioners to record their indicator sets in a compendium. Some 600 initiatives for developing sustainability indicators have been recorded in that source to date (<http://www.iisd.org/measure/compendium/>). Alternatively, consider local governments implementing a Local Agenda 21 program. They are expected to engage their communities in an envisioning exercise, and to work together in developing their own performance indicators for tracking progress. The World Resources Institute (<http://earthtrends.wri.org/datatables/index.cfm?theme=10>) identifies some 6, 500 local governments engaging in Local Agenda 21 by 2001. Many more councils have joined this program since that time, and continue adding to an ever-widening pool of performance indicator innovations for tracking progress to sustainable development.

3.3 This proliferation of ways to measure, analyse and report environmental performance began in the early 1970s. It led in 1998 to the European Environmental Agency (EEA) commissioning work by the International Institute for Industrial Environmental Economics (IIIEE) (<http://www.environmental-center.com/articles/article156/article156.htm>). The IIIEE's report argues strongly for continuity, credibility, and comparability across time and space in environmental and sustainability reporting. The EEA provided the evidence and argument from the IIIEE's report to the European Commission. In turn, the Commission recommended companies recognise, measure, and disclose the environmental impact of their operations by using activity definitions designed for integrated environmental and economic accounting by national governments¹.

3.4 The European Commission's 2001 recommendation is an example of a federation of national governments confronting the problem of unverifiable reports on environmental performance. The US President's Council on Sustainable Development (<http://clinton2.nara.gov/PCSD/Publications/index.html>) similarly argued for continuity, credibility, and comparability. It did so through recommending all levels of decision-making in environmental management – from household and production floor to national government – apply a common set of performance metrics. No action was taken on that Council's recommendations.

3.5 However, also in 2001, the UN EMA Group published a report on procedures and principles to be followed in environmental management accounting, recommending a firm allocate its environmental costs across domains by using the Classification of Environment Protection Activities component of SEEA-2003 (http://www.emawebsite.org/library_detail.asp?record=139). The *Procedures and Principles* report has since been translated into five other languages, with distribution as hard copy or download versions running into tens of thousands over the last three years. Its popularity can be seen as influencing the decision of the International Federation of Accountants (IFAC) to produce and release in November 2004 an *International Guidance on Environmental Management Accounting* as an Exposure Draft. Members of the UN EMA Group wrote IFAC's guidance document.

3.6 "IFAC strives to serve the public interest through the development of standards in the areas of auditing, education, ethics, and public sector financial reporting; by advocating transparency and convergence in financial reporting; by providing best practice guidance for professional accountants employed in business; and by implementing a membership compliance program." (<http://www.ifac.org/About/#Activities>). Its recent initiative in environmental

¹ Commission of the European Communities (2001), Commission recommendation of 30 May 2001 on the recognition, measurement, and disclosure of environmental issues in the annual accounts and annual reports of companies. Official Journal of the European Communities L 156/33 dated 13th June 2001.



accounting can be anticipated to influence activities within key institutional arrangements in the international community. In addition to the UN EMA Group already identified, these are likely to include:

- The Intergovernmental Working Group of Experts on International Standards on Accounting and Reporting (ISAR), established in 1982 through the UN's Conference on Trade and Development (<http://www.unctad.org/Templates/Page.asp?intItemID=2905&lang=1>);
- The Working Group on Environmental Auditing (WGEA) established in 1992 by the International Organisation of Supreme Audit Institutions (INTOSAI) (<http://www.environmental-auditing.org/>); and
- The UN Committee on Environmental and Economic Accounting established in September 2004 by the UN Statistics Division, the London Group on Environmental Accounting, and UNEP (<http://unstats.un.org/unsd/envAccounting/list-of-documents.htm>).

3.7 Other flow-on effects can be anticipated at the international level. For example, key actors from the Global Reporting Initiative (GRI) are engaged in a major (2002-2008) international research agenda considering the role of information and communication technologies (ICT) in managing transition to sustainable societies (<http://www.neskey.com/>). A road map for the agenda declares the following vision: *"The vision is that of a participative network of cities, companies, government, and civil society, all moving toward a society of responsible organizations. The sustainable society is based on a solid platform of a sustainable economy, which is guided by a systemic feedback system. The feedback system supports 360 degree accountability, 360 degree transparency, and 360 degree participation, and utilises a core set of measures, indexes, and methods commonly used by businesses, cities and regions, civil society, and governing bodies. Global networks and closely linked practice communities improve measures and methods, and ICT capability supports databases and analysis tools for a wide variety of users and contributors."* (Allee V & Luyckx M (2003) *Neskey Roadmap*, p16).

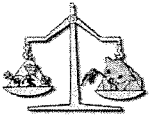
3.8 Much of the infrastructure necessary for realising the Neskey Vision is already in place where national governments have been experimenting with integrated environmental and economic accounting. They can only conduct these experiments by engaging 'businesses, cities and regions, civil society, and governing bodies' in the statistical collections necessary for constructing the integrated accounts. Since the UN, the OECD, the European Commission, the World Bank, and the International Monetary Fund endorse and jointly publish SEEA-2003 then the extent of that engagement is likely to accelerate significantly in both developed and transition economies. The balance of this submission provides some evidence on the infrastructure's existence, supported by examples of advocacy for its application to managing sustainability transition at national and sub-national scale.

4. Vertical integration of policies and instruments used by governing bodies.

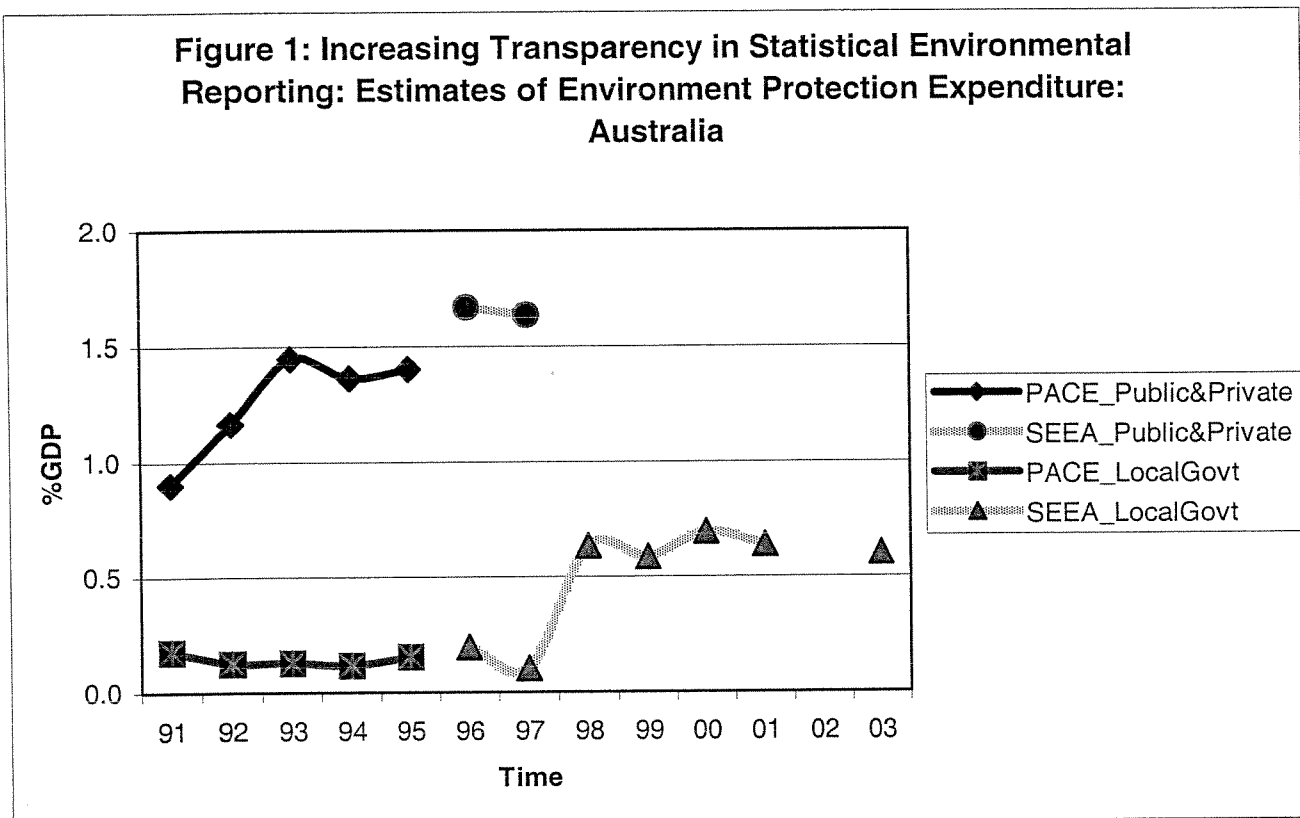
4.1 Recognising the significance of environmental accounting as an essential tool for sustainable development, in March 2004 the Assembly of the European Parliament recommended promotion and adoption of common environmental accounting standards by national, regional, and local authorities. A key intent is vertical integration across spheres of governments of their sustainable development policies and instruments (<http://assembly.coe.int/Documents/AdoptedText/TA04/EREC1653.htm>).

4.2 Especially in federal systems the adoption and application of common accounting standards should provide insights into the consequences of devolution and subsidiarity processes. A nation's efforts in expending resources on protecting environments and managing natural resources are shared among households, businesses, and all spheres of government. Effective vertical integration of policies and instruments is not possible without the transparency that comes from applying common accounting standards and practices. Without transparency the process of inter-government relations becomes a cycle of competing and unsubstantiated claims. Without transparency the process of building strategic partnerships between governing bodies in public and private sectors will fail.

4.3 In the early 1980s the OECD developed a Pollution Abatement and Control Expenditure (PACE) framework for measuring public and private sector expenditures on environment protection, with the US and some other member-states beginning to compile and publish their estimates at that time. The Australian Bureau of Statistics (ABS) first used the PACE framework to compile public and private sector estimates for Australia in 1991, and continued using that framework for a number of years. The ABS switched to the UN's interim version of SEEA to compile its 1995/96 and 1996/7 estimates. All estimates compiled by the ABS during 1991-97 were based on by-products of other private sector collections, complemented by analysis of budget and other documents from the public sector.



4.4 In 1996/97 the ABS, the National Office of Local Government, and the University of Canberra began pilot studies on a direct collection from local governments of their environment protection and natural resource management expenditures. Sufficient numbers of local governments volunteered their efforts to enable a first national estimate for their industry to be compiled in 1997/98. Collections became mandatory in subsequent years for, initially, 50% and now 70%, of councils. Figure 1 reflects the changes in transparency possible from using regular collections, from direct collections, and from more comprehensive accounting frameworks. Broadly, absolute measures embedded in Figure 1 show a situation where our nation's households, businesses and governments now spend around \$12 billion a year on environment protection and natural resource management. The 700 or so organizations making up the nation's local government sector account for around 37% of this amount.



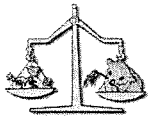
Source: Compiled by Green Measures from ABS Publications 4603.0 and 4611.0

4.5 Although examples should exist, the author has not been able to identify any substantive policy initiative in Australia where decisions of central governments have been informed by evidence from the above ABS environmental accounting products. For example, in State-of-Environment-Reporting practice, neither at national level of ANZECC core indicators, or in NSW guidelines for local governments, is expenditure on environment protection and natural resource management recognised as a response indicator.

5. More effective policies for engaging businesses in the transition to sustainability

5.1 Environmental and sustainability accounting and reporting can be considered as process innovations. They are practices perceived as new by individuals and organizations² from both private and public sectors as they consider engaging in environmental or sustainability governance (<http://www.innovation-enterprise.com/6.2/>). A key idea in the diffusion of innovations is that over time the rate of adoption of an innovation within any given social system will initially accelerate, and then slow down as adoption reaches saturation (Figure 2). Early in the diffusion process an interval is reached where the number of adopters approaches critical mass, with further adoption becoming self-sustaining

² See EM Rogers (2003), *Diffusion of Innovations*, 5th Edition, Island Press for the authoritative work in this research field.



thereafter. When promoting an innovation under conditions of voluntary adoption, a government's policy target should be to select those instruments most effective in driving adoption to the area of critical mass (take-off, tipping point). Various studies suggest the area of critical mass occurs where some 10-20% of adopting units within a social system have accepted the innovation under consideration.

5.2 Plotting an Innovation Adoption Curve through observation typically involves collecting primary data from fieldwork within a given social system. Alternative methods seem possible through the widespread use of ICT. For example, secondary data on the number of organizations engaging in forms of Corporate Environmental Reporting (CER) are placed in the public record, and provide an indicator of change to pro-environmental behaviour within the private sector. Establishment in the 1970s of Pollution Release and Transfer Registers in Europe and the US is an early example of data on pro-environmental behaviour available to anyone with Internet access. The International Standards Organisation has been placing results from annual surveys of ISO 14001 Certifications on its Website since 1995. A more recent example of secondary data widely available through the Internet is the searchable database of businesses identifying themselves as sustainability reporters using GRI guidelines.

The Innovation Adoption Curve

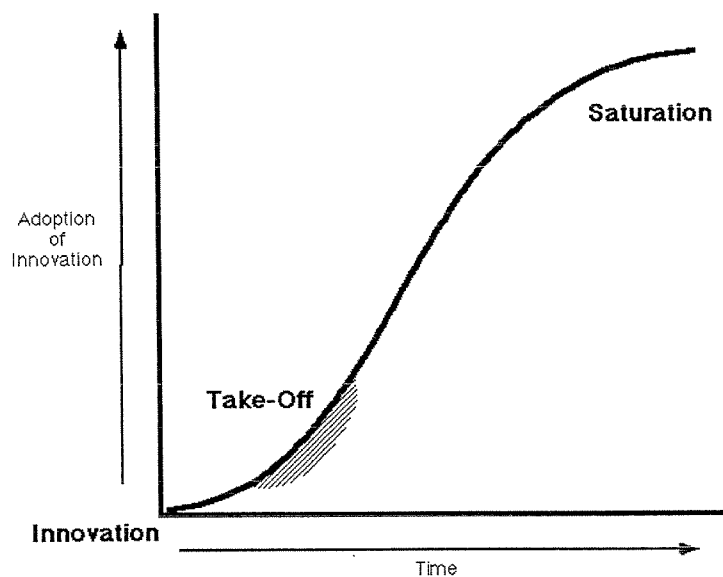


Figure 2: A Generic Adoption Curve

5.3 It is possible therefore to construct an Innovation Adoption Curve for environmental and sustainability reporting practice from secondary data on cumulative totals of innovation adoption. Depending on the data available and selected, and the social system considered, it is then possible to evaluate the effectiveness of policies promoting their adoption. For example, colleagues within the UN EMA Group took a global view in considering the effectiveness of policies promoting adoption of CER practices that began with the Action Plan agreed to by delegates to the UN's 1972 Conference on the Human Environment (http://www.emawebsite.org/documents/emarc_316.pdf). Their first-round estimates suggested policies promoting adoption of CER practices over some three decades have been ineffective in driving innovation adoption towards the tipping point, since only 0.5% of the world's businesses were exhibiting those forms of pro-environmental behaviour by 2002. A more recent Australian example follows from combining ideas from the Innovation Adoption Curve with secondary data downloaded from the Internet.

5.4 ABS data indicate that, exclusive of agriculture, forestry and fishing industries, some 610,000 employing-businesses operate in Australia. Some 135,000 commercial establishments operate in agriculture. We can assume a saturation point in CER innovation adoption throughout Australia to be around 745,000 businesses. According to the data readily available from Websites, around 0.6% of Australian businesses engage in commonly recognised forms of CER (Table 1). Estimation errors in an exercise taking around 15 minutes to conduct are readily acknowledged in presenting Table 1 to the Inquiry. The results are, however, sufficient to demonstrate that in Australia the adoption of CER innovation remains far from the take-off point on the Innovation Adoption Curve.

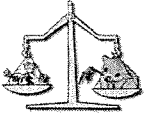


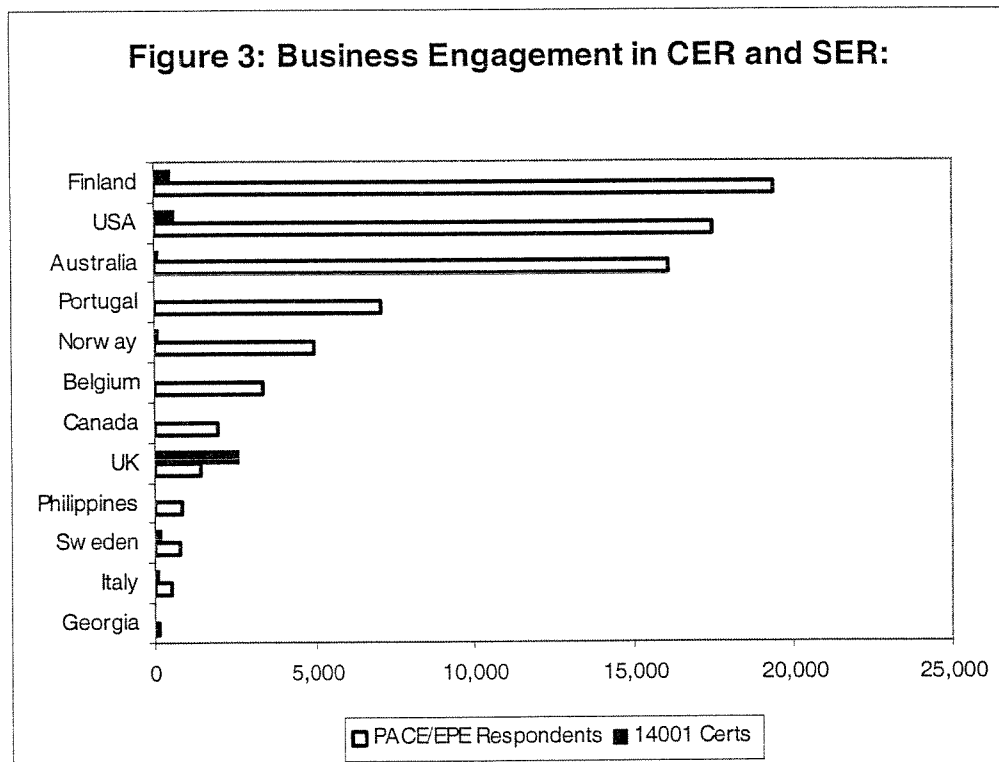
Table 1: Estimating Adoption of CER Innovations in Australia

CER Mechanism	Businesses or Facilities Engaged	Year	Data Source
National Pollutant Inventory	3,364	2002-3	http://www.npi.gov.au/overview/index.html
ISO 14001 Certification	1,250	2003	http://www.iso.org/iso/en/iso9000-14000/pdf/survey2003.pdf
Sustainability Reporting	116	2004	http://www.deh.gov.au/industry/corporate/reporting/survey.html
GRI	32	2004	http://www.globalreporting.org/guidelines/reports/search.asp
TOTAL	4,762		

5.5 CER can be considered as a set of process innovations with many characteristics. The set can include innovations mixing voluntary with mandatory schemes; mixing financial with physical measures; sometimes specifying processes but not measures; sometimes specifying measures but not processes; and all placed into a global market by competing designers and advocates. A distinguishing feature of CER is disclosure of the practitioner's identity.

5.6 Statistical Environmental Reporting (SER) shares many CER features but differs in at least three important respects. First, practices are designed through collaboration among national governments and their international institutions, not by competing stakeholders. Second, the collector does not disclose the practitioner's identity. Third, the extent of business engagement in SER seems to be significantly higher than in CER, and offers policy advisors some food for thought in asking how this form of environmental or sustainability reporting can be used to drive pro-environmental behaviour closer to the tipping point.

5.7 Figure 3 is used here to illustrate the third point of difference between CER and SER. It shows the results of a search where statistical agencies have placed sample sizes used in estimating business expenditures on environment protection on the public record. Examples were found for eleven cases where national estimates on such expenditures have been made under Pollution Abatement and Control Expenditure (PACE) or Environment Protection Expenditure (EPE) frameworks. The extent of SER engagement by businesses in each case can be considered in relative terms against the most widely used form of CER: ISO 14001 Certification.



Source: http://www.emawebsite.org/documents/emaric_414.pdf



5.8 With the exception of the UK and Georgia, the extent of business engagement in SER is many times greater than in the most popular of CER practices. In other words, the available evidence points to opportunities for forming and implementing policies consistent with the Neskey Vision (paras. 3.7 and 3.8). Realising these opportunities requires a mindset recognising statistical collection not as a regulatory impost, but as a means to better inform decision-making across all levels of sustainability governance.

6. Sustainability Reporting in the TASC Project

6.1 The author began working with the Director, Environment, Planning, and Administrative Services in Eurobodalla Shire Council in 1998, as part of collaborative work between many local governments with the ABS, the National Office of Local Government, and the University of Canberra (see para.4.4). They saw sustainability reporting as reflecting change over time in a local community's natural, built, and human capital stocks; and of the cross-impacts between those stocks (Figure 4). Further, the simple model provides symmetry with legislative requirements in New South Wales for local councils to compile a State-of-Environment-Report, a Condition of Public Works Statement, and to report progress in implementing a Social Plan.

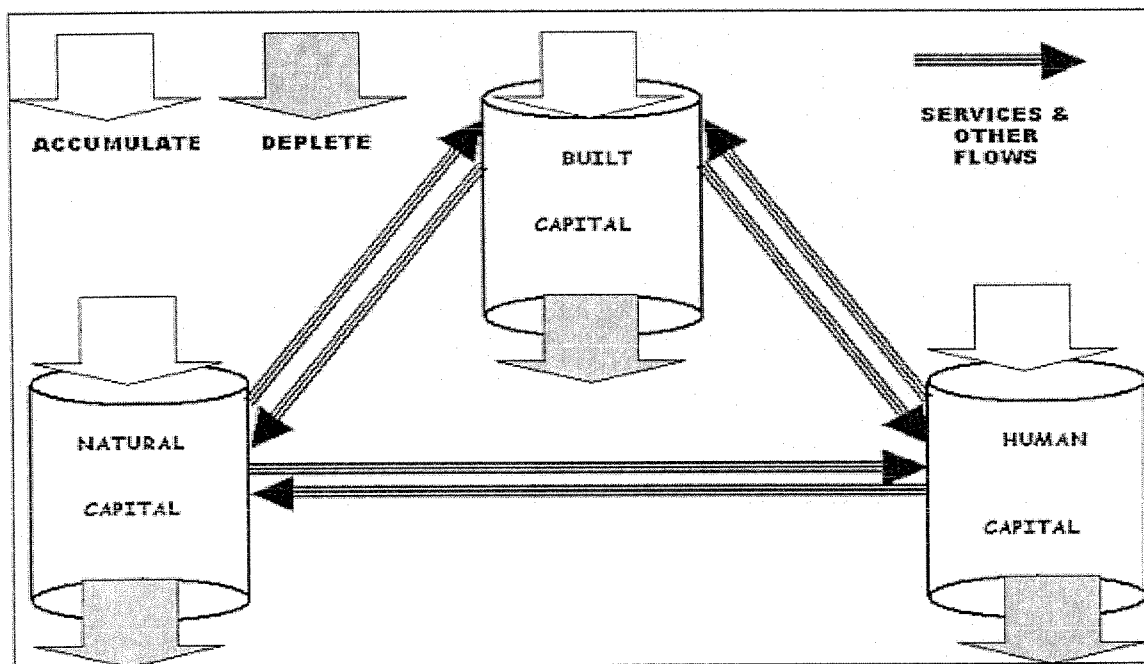
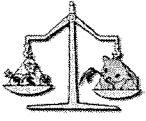


Figure 4: A Model for Integrated Assessment and Sustainability Reporting

6.1 In 1999 the Eurobodalla Shire Council presented evidence of its innovations in sustainability accounting and reporting to an International Expert Management Seminar. By then the Council had gone far beyond demonstrating a capability shared with many other local governments to report estimates of its Environment Protection and Natural Resource Management expenditures and revenues to the ABS. It had accessed and applied elements of the 1993 Interim Version of the UN's Handbook on National Accounting Practice: *A System for integrated Environmental and Economic Accounting*, changed its Chart of Accounts to better reflect cross-impacts between capital stocks, and was able to illustrate and advocate a Code of Practice for the NSW local government sector that combined international developments in integrated accounting with national and state arrangements³.

³ Eurobodalla Shire Council (1999), *Environmental Accounting: A Code of Practice for Local Government*, Presentation at ICLEI's 4th International Expert Management Seminar, *Developing an Environmental Accounting Standard for Local Governments*, Gold Coast.



6.2 In May 2001 the Eurobodalla Shire Council adopted its Sustainability Policy *Sustainable Living: An Integrated Approach* (http://www.eurocoast.nsw.gov.au/Publications/Reports/Adopted_SLP.PDF), incorporating TBL Accounting practices. The Department of Environment and Heritage published a case study showcasing Eurobodalla's practice (<http://www.deh.gov.au/industry/finance/publications/pubs/esc-ema.pdf>), as part of a case study series published in 2001 on environmental management accounting. That case study is now part of the international best practice literature used in the IFAC Guidance Document (see para. 3.5).

6.3 In 2003 the Eurobodalla Shire Council was awarded first prize in the TBL Category of the World Environment Day Awards, competing against other finalists: Wespac Financial Services, AMCOR Cartonboard, and Collex. In awarding first prize in TBL best practice, the panel of judge's commented as follows: *"Eurobodalla Shire displayed a highly integrated, comprehensive approach to all aspects of the Triple Bottom Line as well as to all aspects of the Shire's business. Eurobodalla Shire has shown an example of best practice Triple Bottom Line thinking and implementation. Their achievements should be extended to corporations and to all other organisations. Indeed a big challenge will be to extend these lessons and practices implemented by Eurobodalla Shire."*

6.4 The TASC Project reflects a response to that challenge through creating a team of multi-disciplinary researchers under the auspices of the University of Southern Queensland's Office for Research and Higher Degrees. The team is developing a strategic approach to the diffusion of process innovations for managing sustainability transition. It is doing so by continuing to test leading-edge ideas from Australia and overseas with Eurobodalla Shire Council. Processes of adaptation with other members of the Southern Councils Group, and with local governments and their communities beyond the NSW South Coast innovation cluster, then follow. The Southern Rivers CMA and other institutions with research interests in measuring and managing sustainable development are contributors and observers in the work of the innovation clusters.

6.5 The operating principle of collaboration between the TASC Research Team with the Eurobodalla Shire Council and other participating councils is co-production of usable knowledge. The Team is providing quantitative measures of change in local community conditions from ABS and other data sources, consistent with the framework of Figure 4, and applying approaches to integrated assessment developed primarily for sustainable development policies at sub-national scale⁴. Council and community representatives are providing their local knowledge as to qualitative change with the stocks of human, built, and natural, capital domains over time.

6.6 A significant advance over sustainability reporting conventions is incorporated into the design of collaborative work with Eurobodalla Shire and other pilot study councils. Council and community representatives are forming their own response statements to assessments of change in community condition. Pilot study councils will use decision-support software in a pair-wise comparison of the response statements they generate. The product from this comparison is a map of perceived inter-relationships between the human, built, and natural capital stocks of a local government area. Most approaches to sustainability reporting in Australia and overseas do not yield a meaningful account from the Pressure-State-Response Model, nor have a capacity to show horizontal connections and cross-impacts between capital stocks.

6.7 Examples of world best practice in sustainability reporting have, in the author's opinion, been under development on the South Coast region of New South Wales for some years. That development continues through grassroots nurturing a community of practice in the region with strong connections to a global network. The vision of capturing synergies between a knowledge economy and sustainable development (see para. 3.7) is being realised. Raising awareness of these grassroots processes within the Committee's Inquiry into Sustainability Reporting in the New South Wales Public Sector has been the purpose of this submission.

Dick Osborn
Hawker, ACT
30th November 2004

⁴ http://www.glogov.org/upload/public%20files/pdf/publications/bc%20proceedings/bc2002/bc_2002_ch04_grosskurth.pdf