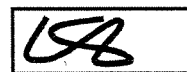




The University of Sydney



Integrated
Sustainability Analysis ISA™

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Mr Matt Brown
Chairman
Public Accounts Committee
New South Wales Parliament
Macquarie Street
Sydney NSW 2000

Dear Mr Brown

Re: Inquiry into Sustainability Reporting in the New South Wales Public Sector

The University of Sydney welcomes the opportunity to provide input into the Public Accounts Committee's deliberations on Sustainability Reporting in the New South Wales Public Sector.

We would like to make comment on the following points raised in the inquiry terms of reference:

- 3 a.: Consider sustainability reporting initiatives within the public sector in Australia and in international jurisdictions**
- 3 b.: Study the processes agencies are using to achieve the integration between the dimensions of social, economic and environmental sustainability and core principles of sustainability**
- 3 c.: Examine the value of core sustainability indicators across all public sector agencies versus development of indicators which are agency-specific**

We trust that our comments and suggestions will be useful to you in your inquiry into this important issue. We will be happy to supply further information or to address the committee if you think this would be helpful.

Yours sincerely

Dr Joy Murray
Sustainability Reporting Project
For the cross-disciplinary ISA research team

Submission to the NSW Public Accounts Committee

Inquiry into Sustainability Reporting in the New South Wales Public Sector

Background

The University of Sydney's Integrated Sustainability Analysis (ISA) group is a multi-disciplinary research team bringing together expertise in environmental science, economics, energy technology, social science, ecology, climate modelling and climate change, water and waste technology, agriculture, education, engineering, computing, mathematics, atmospheric science and ocean dynamics, nuclear physics and dosimetry, and material science.

ISA undertakes research, applications development and consulting on environmental and broader sustainability issues. The aim of the group is to develop scientifically rigorous, quantitative, consistent and comprehensive approaches for integrated sustainability analysis.

In 2003 the NSW Department of Environment and Conservation through the Environmental Trust funded a two year project at the university to investigate the needs of organizations in the implementation of sustainability reporting (<http://www.isa.org.usyd.edu.au>). The aim of the project is to develop a reporting tool that organizations will be able to use in the calculation of their triple bottom line. The 'engine' that will drive the reporting tool is the methodology being developed by ISA (see below).

In 2002 Dr Manfred Lenzen, (School of Physics, University of Sydney) and Dr Sven Lundie (Centre for Water and Waste Technology, UNSW) completed a study of the Ecological Footprint of the Sydney Greater Metropolitan Region and New South Wales for the NSW Environment Protection Authority. The report compared methodologies before conducting the study using the methodology developed by ISA.

One of the report's conclusions was that only the ISA methodology can actually calculate the bottom line. All other methodologies require decisions to be made about where the cut off point will be (i.e. what will be included in the calculation and what will be declared outside the responsibility of the organization - beyond the boundary of the report).

3 a.: Consider sustainability reporting initiatives within the public sector in Australia and in international jurisdictions

The Global Reporting Initiative's *Sustainability Reporting Guidelines* and the Australian guide to environmental reporting *Triple Bottom Line Reporting in Australia* take an audit approach to sustainability reporting. The guidelines contain a range of indicators that provide good reporting *scope* or *breadth*. In order to make the audit manageable a *boundary* is set. This boundary usually limits the audit to immediate onsite inputs that are deemed to be within the control of the reporting entity. Using the audit approach alone can lead to inconsistencies within and between assessments because the boundary can be somewhat arbitrary and different organizations will draw the boundary in different places.

This issue has been addressed, at the request of the Commonwealth Department of Environment and Heritage, by researchers from the University of Sydney and the CSIRO Sustainable Ecosystems Division. The group has developed a quantitative TBL model, Integrated Sustainability Analysis (ISA), based on

Input/Output Analysis. The model differs from the audit approach in that it includes the full upstream supply chain, thus providing reporting *depth* to complement the *breadth* of the audit approach and consistency of reporting because there is no cut off point or imposed boundary.

Adopting the ISA methodology is increasingly being seen as good economic sense and part of a sound risk management strategy. Accounting for the full supply chain using this methodology removes the considerable work involved in agreeing to and defining boundaries. In a large organization the work involved in negotiating consistent boundaries so that benchmarks can be set has a huge time/cost implication. Agreeing to boundaries across organizations so that meaningful comparisons can be made is well nigh impossible. However unless this work is done there is a high risk that the effort put into reporting will be worthless as a basis for comparison and for future planning. Using the ISA methodology means that you are dealing with the real bottom line every time.

The Global Reporting Initiative (GRI) and the Global Footprint Network (GFN) are aware of the boundary issue and are exploring ways of dealing with it. To this end they have been in discussion with the Sydney University team. Work has been commissioned to be undertaken with the aim of incorporating ISA approaches into a global Ecological Footprint Standard.

3 b.: Study the processes agencies are using to achieve the integration between the dimensions of social, economic and environmental sustainability and core principles of sustainability

The University of Sydney has developed an analytical framework that achieves integration by evaluating TBL indicators in a standard, repeatable way, and in a common framework enabling accurate benchmarking.

The methodology enables reporting on indicators covering environmental, social and economic issues including: energy, water, land disturbance, greenhouse gas emissions, employment, income, taxes, exports, imports, profits, as well as impacts on education, community and cultural services. These indicators can be decomposed to reveal impacts at many different levels, from micro (e.g. a company's on-site emissions) to macro (world-wide supply-chain emissions). Results are presented so that benchmarks, trade-offs and priorities for action across the three dimensions of sustainability can easily be identified and impact on the core principles of sustainability can be clearly seen and considered.

3 c.: Examine the value of core sustainability indicators across all public sector agencies versus development of indicators which are agency-specific

This does not need to be an either/or decision. The Global Reporting Initiative and Environment Australia both suggest core indicators and what they call 'additional' indicators. Core indicators are seen as those most relevant to most organizations. Additional indicators, they suggest, can be tailored to specific needs and used to give a more complete picture.

Core indicators, calculated in a consistent and repeatable way (e.g. using ISA methodology) across all public sector agencies will allow for comparisons to be made within and between agencies and over time. This will require that the boundary issue is addressed and the boundary for all core indicators is consistent across agencies.

Use of additional agency-specific indicators will allow for stakeholder involvement in their development. Stakeholder involvement is recognized as important in gaining commitment to the organizational change implied in the adoption of government-wide sustainability reporting.

Ultimately the question is not *core or additional indicators* but which are relevant and can be used as benchmarks to demonstrate improvement over time. Different indicators may be relevant and important to different stakeholder groups.

University of Sydney

NSW Public Accounts Committee
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