



The University of Sydney
Integrated Sustainability Analysis™



Sustainability Reporting Project

Case Study The University of Sydney

2005

**SUPPORTED BY A GRANT FROM
THE NSW DEPARTMENT OF ENVIRONMENT AND
CONSERVATION'S**



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1 Introduction

The University of Sydney, founded in 1850, is Australia's first university and is one of Australia's largest. It provides tertiary education to students and carries out extensive research in the health, humanities and science fields. In 2003 it had an annual budget of \$921 million, employed 5,284 full-time equivalent staff, and it provided education to over 46,000 students spread over nine campuses in Sydney and one in Orange, 250km west of Sydney. As such, its operations have a significant impact on the environment.

In 2002, the University of Sydney adopted an Environmental Policy, in which it outlined its commitment "to environmental best practice, and to the continual improvement of its environmental performance." To date, the University has hired three additional staff to help it achieve these goals. They are currently in the process of developing environmental strategies. They have also undertaken benchmarking audits (e.g. a waste audit), and are investigating a number of methods for ongoing monitoring.

2 Background

To date (2005) the external environmental reporting at the University has been to:

- the NSW Environmental Education Council in 2003 and 2004
- The annual Tertiary Education Facilities Management Association benchmarking report
- EPA licence – annual review
- University of Sydney Annual Report which includes an environmental section
- Environmental Trust Grant reports
- Green Star principles applied to all new buildings – outlined in Development Applications to authorities.

These reports are in the NSW public domain and Australia wide HEI domain. The Campus Property and Services¹ (CPS) Environmental Strategies Team co-ordinates these responses with the Risk Management Office.

Internal environmental reporting at the University has been to:

- UniNews magazine – results of Eco footprint for the School of Physics
- Facilities Management Office (FMO), now Campus Property and Services (CPS), reporting on energy and water consumption, waste tonnages
- FMO/CPS internal reports on environmental risk
- Web site results and discussion papers in public forum
- Annual Report – environmental section

These reports are widely available to the University Community.

¹ Formerly the Facilities Management Office (FMO), referred to as such where appropriate throughout this document.



When the Sustainable Campus Environment Program was established in 2003 a series of reports was developed to provide the baseline environmental data these include:

- Waste Audit and Management Report May 2004
- Risk Management Plan Assessment 2004
- Water Discussion Paper 2004
- Energy Discussion Paper Aug 2005
- Transport Survey 2001
- Tree Management database 2003
- Cumberland Campus Water Reports 2002; 2003; 2004
- Utility Information System – Energy, Gas and Water monitoring 2000-present

The Integrated Sustainability Analysis (ISA) group in the School of Physics at the University of Sydney has developed a Triple Bottom Line (TBL) accounting methodology for analysis of economic, environmental and social performance of organisations. An invitation for the University of Sydney to join the pilot project for further development of this methodology into a stand-alone software package has provided the University with good baseline data on emissions.

What better place to start than with an emissions and footprint report to provide a measurement of performance and to indicate clearly what areas require planning for reduction or more efficient use of resources.

3 Context for change

There is no regulatory framework that TBL reporting falls under however the University has a responsibility to its community to report on its use of natural resources and their impacts, including greenhouse gas emissions.

The NSW Department of Energy, Utilities and Sustainability has requested from the University an energy saving action plan. This plan can include emissions abatement strategies but inclusion of this is optional; emissions abatement is considered to be a by-product of reduced demand.

However the University's organisational climate is such that there are many departments in the University and various administrative centres interested in green issues. Also some elements of finance are centralised and easily accessed for data gathering purposes.

There exists a broad group of environmental stakeholders including: TASC – Towards a Sustainable Campus - a group of academics and general staff committed to addressing sustainability issues; the Environment Collective – a group of interested students; Uni Greens; and the Student Union Environment Committee.



Campus Property and Services (CPS) is aware that other universities have already engaged in TBL reporting, for example: Monash, Newcastle and the Sunshine Coast. Newcastle and the Sunshine Coast have used eco-footprinting. The CPS is therefore aware of the footprinting tool as a good reflective and reporting tool.

In light of the fact that other universities are already experimenting with eco-footprinting the then FMO invited a student, as part of her Masters studies in Environmental Management, to review what had been done at Monash University and report to the FMO on the possible application and appropriateness of TBL to the University of Sydney. She was also asked to consider suitable indicators.

The option to participate in the TBL research project therefore came at an opportune time.

4 Driving forces for change

In November 2002, after seven years of work by the Environmental Steering Committee, the University released its Environmental Policy and implementation plan. The implementation plan was subsequently shelved, however the political will to address environmental issues remained.

The FMO took the opportunity to drive the necessary change, allocating a budget and resources for employment of an environmental team.

In July 2003, urged by the Director of FMO and members of TASC, the University created the position of Manager, Environmental Strategies.

About the same time the School of Physics approached the Chief Finance Officer and the Senior Deputy Vice-Chancellor about University participation in a TBL reporting action research project. The University's role would be to provide feedback on tools and support materials to be developed over the following two years (2004/5) and in return the University would receive a TBL report.

Offer of a place in the TBL action research project was fortuitous and provided the necessary catalyst for change. It came at a time when not only had a Manager's position been created to plan and implement environmental strategies but also the FMO was becoming aware of what had been accomplished in TBL in other Universities.

There was little environmental reporting already taking place at the University and nothing of this nature was being included in the annual report. There was therefore pressure from the knowledge that other universities were forging ahead. Even so had it not been for the research project take up would have been slower.



5 Process

In 2003 the Integrated Sustainability Analysis team effectively engaged the approval of the Pro Vice-Chancellor, Infrastructure, the Director of what was then Facilities Management and the Chief Financial Officer (CFO) to participate in this program.

In early 2004 the Manager, Environmental Strategies attended, as a research partner, the first workshop of the TBL reporting research project. Day one of the workshop addressed the ISA TBL reporting methodology. Day two was spent in clarifying the role of research partners, expectations of the project and an explanation of data to be collected.

Several meetings with the research team followed and six months passed during which time some attempts were made at locating the data required for the TBL report (and for the purposes of the project). Most of these attempts were unsuccessful. It was difficult to get access to onsite data and impossible to access financial accounts.

From the beginning the major obstacles were:

- accessing the data, it was only possible to access the FMO's data not University-wide data;
- requesting further data, any request had to come from the then FMO, no-one else had the authority to request University wide data;
- entering data into the spreadsheet – the spreadsheet was seen as difficult to understand, it was hard to know what was required and considered to be 'a daunting task';
- time to devote to data collection and entry;
- choosing suitable indicators.

To address some of these issues in August 2004 a member of the ISA team and the Manager, Environmental Strategies, met with the Chief Finance Officer to discuss the gathering of relevant financial data. The interest of the CFO ensured high-level buy-in to the project and with his renewed support the TBL reporting process got underway. The meeting was followed by a presentation from ISA and the Facilities Management Office to the Finance Management Committee to gain their commitment to the value of the process to the University.

Following this the CFO appointed a contact person in his department who would be responsible for providing the necessary financial data. A student was employed to extract the necessary data and enter it into the TBL spreadsheet.

Meanwhile the Manager, Environmental Strategies attended further TBL reporting project meetings and workshops.



6 Product/s

The TBL report has proved useful. The report has been brought to the attention of the executive and analysis of the university's ecological footprint has allowed Campus Property and Services (CPS) to lobby for green power.

The CFO has been made aware of the huge contribution that air travel makes to the University's ecological footprint.

CPS hopes to be able to develop an emissions plan on the strength of the report for presentation to the CFO, Deputy Vice-Chancellor, Infrastructure and Administration and the University Senate.

The report will provide the basis for a University-wide debate about levels of emissions and how they might be offset. It has provided facts and figures using a robust methodology, and for this reason can be quoted with confidence as the underpinning evidence on which to build a change strategy.

The report gave rise to a paper presented at the 5th Australasian Conference of Sustainable Tertiary Education held at James Cook University, Cairns, on the 21-23 September 2005. It focused on the TBL methodology and the University's TBL report. This enabled the University to position itself in the Tertiary Education Sector's TBL debate, something that had not previously been possible.

The student green lobby group and the TASC group are interested in the report as leverage in their own green agendas.

The most notable draw-back is the lack of opportunities for comparison with other universities. Until others use this methodology comparison will not be possible.

7 Practice

The effect of air travel on green house gas emissions and the amount spent on air travel university-wide were somewhat of a shock to the University's Finance team.

The report has alerted the university to the necessity to offset the emissions attributable to air travel through, for example, green power purchases.

Since completing the report the University has applied the ISA methodology to scenario planning. It has conducted a cost/benefit analysis of a proposed internal project.

CPS intends repeating the TBL reporting process regularly so that comparisons can be made over time. However it is recognised that changes



will need to be made to the way data is collected so that it becomes unnecessary to employ someone specifically to extract the data for the report.

CPS envisages that future work might include, say, cost in green house gas emissions per student degree.

8 Conclusions

Involvement in the TBL reporting research project was an attractive, if daunting, prospect. The approach was very different from other approaches with which the participant was familiar. Although the project workshops made it clear that there was a connection between the project and the benchmark study *Balancing Act*, it was difficult to see that connection. There were problems with specialised and inconsistent terminology and there was a lack of clarity about project expectations and participant roles. The question of 'what's in it for me' remained largely unanswered.

Major issues that arose in trying to implement the project were: funding (it really required a project officer); access to the data; and finding someone who could track down the data. In 2004 the project was also not a high priority on the FMO's priority list. It was seen to be offering a 'rolls royce' solution while the FMO was still considering the 'go-cart'.

Conceptually the project posed difficulties. The use of Life Cycle Analysis seemed a bit misleading because downstream effects were not included. The idea of onsite and offsite (or upstream) effects were considered big concepts, hard to grasp for the uninitiated.

The report itself has been useful and will continue to generate discussion. However mining the results in the report is again a difficult and time consuming task. To make the most of it requires someone to translate the outputs.

Future reports need to recommend say, three things that need to change, and provide strategies to address the necessary changes. For example it could say something like: in order to reduce the University's ecological footprint you need to purchase x% of green power; recycle this waste in this way; aim for no more than x air miles; lease two vegetarian restaurants; require all catering to provide 50% vegetarian fare.

The report needs to make concrete recommendations for realistic action as well as offering a service to assist in implementation, for example through making presentation to influential groups within the University.

In summary while it remains a time consuming and daunting exercise and while ever there is no statutory requirement for this kind of reporting it will remain a luxury for most organisations even though it offers a wealth of



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reliable and consistent indepth information on which to base decisions and with which to asses risk.

However the University now has a report on emissions and priorities can be targeted. Meanwhile, the SRC will be helped in presenting a strong argument for the University to consider buying green power to off-set these emissions.

An opportunity exists to work together on these outcomes and an Energy Discussion Group is being formed to meet regularly commencing in September 2005.