

Workshop on Material Flows and Environmental Impacts behind International Trade  
of Japan  
February 27, 2006,  
Akihabara Convention Hall, Sotokanda, Chiyoda-ku, Tokyo, Japan

Invited speech 3:

**Triple-Bottom-Line Accounting - a new software with a case study of Australian mining**

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Triple-Bottom-Line (TBL) accounting is a wide-spread concept for firms wishing to realise broader societal objectives in addition to increasing shareholder value. TBL Accounts routinely cover social and economic indicators in addition to environmental indicators, and enable decision-makers to quantify trade-offs between different facets of sustainability. At the University of Sydney, TBL Accounting has been formulated as a quantitative framework using an input-output-based LCA method. This framework has been applied to dozens of organisations in reporting on their sustainability performance - companies, government departments, NGOs. Experiences were collected in a 3-year pilot project. It became clear that the data collection burden for the organisation has to be as small as possible. As a result, a software tool was developed in collaboration with the using organisations, enabling users to create a comprehensive sustainability report solely by importing their existing financial accounts. Software outputs include aggregate figures, detailed breakdowns and rankings of indicators into supply chain contributions. Users had no difficulty in understanding and accepting indirect impacts occurring off-site, in addition to on-site direct impacts. Users felt that assessing their organisation's indirect impacts was a valuable feature because it increases abatement options, enables meaningful benchmarking, avoids loopholes in reporting and informs about real risk. Sydney University's TBL software has been designed so it can readily be implemented for any economy that for which input-output data complemented with physical data are available. Trial versions include Australia, the UK, Japan, the US, and Germany. In principle it is possible to develop a version based on a multi-national IO framework that covers international trade flows.

The presentation to the workshop will include 1) an introduction into the concept of the Triple Bottom Line for corporate sustainability reporting, 2) a report on experiences with Australian business and government, 3) a presentation of the Japanese software version, 4) an example output for an Australian mining sector.

\*) ISA, School of Physics, A28  
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