



Integrated Sustainability Analysis Newsletter Issue 1, 2011



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[^ Latest ISA Activity](#)

NEW Unit of Study: Techniques for Sustainability Analysis (PHYS5032)

ISA is offering a unit of study in Semester 2 (from July) this year. It can be undertaken either as part of the Master of Sustainability program or else as a single unit of study for which you would gain a standard University transcript to say that you had satisfactorily completed the Unit. It will be held on Thursday evenings 5.00pm – 8.00pm from July 28th. You can find information concerning enrolment at:

http://sydney.edu.au/courses/?uos=1&uos_sef_id=PHYS5032_Techniques_for_Sustainability_Analysis_10695

If you intend to enroll please drop Joy Murray an email to let her know: joy.murray@sydney.edu.au

19th International Input-Output Conference

The 19th International Conference on Input-Output Economics will take place in Washington DC from 13-17th June (<http://www.iioa.org/Conference/19th/conference.html>). ISA has been invited to provide one of the inaugural teaching modules for the International School of Input-Output Analysis.



The International School of Input-Output Analysis grew out of an idea proposed by ISA to the IIOA Council at the conference hosted by ISA in Sydney last year.

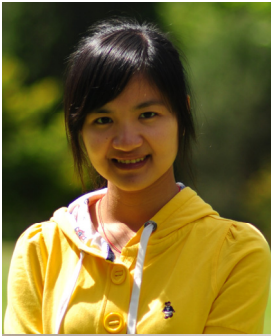
ISA's teaching module to be presented at the Washington Conference is: Multi-Regional Input-Output Analysis.

Lecturers: Keiichiro Kanemoto, Arne Geschke, Dan Moran
It will cover an introduction to MRIO followed in the second session by issues associated with the availability and compatibility of data. The third session will introduce constrained optimization and the final session will bring these aspects together into a discussion of databases, computing capacity and visualization.

For more information see:

http://www.iioa.org/Conference/19th/school_of_io.html

Introducing new members of the team



Jun Lan is a PhD student with Prof. Lenzen and is working on applying Input-Output Analysis to adaptive redevelopment and new construction of port facilities. She studied Environmental Science for BA and Ecology for MSc in Renmin University of China. She has worked in the Waterborne Transportation Institute, Ministry of Transportation of China for two years, providing sustainability solutions and safety strategies for the government and the port enterprises.



Darian McBain is a PhD student with ISA at the University of Sydney and is working on social indicators for Input-Output Analysis. She holds a Bachelor of Engineering from the University of New South Wales and an MSc in Business Strategy, Politics and Environment from the University of London. Darian has worked in both the UK and Australia advising governments and the private sector on sustainability strategy and sustainable supply chain management. Upon returning to Australia in 2007, Darian cofounded the consultancy Blue Sky Green to develop sustainable solutions for businesses and government.



Keisuke Nansai is Visiting Professor of Sustainability Research at ISA. He is visiting from the National Institute for Environmental Studies in Japan, where he is a senior researcher. Since completing a PhD in Energy Science, he has been working on environmental emission accounting, life cycle assessment, material flow analysis and input-output analysis. His current research interests are the quantitative analysis and policy assessment of global resource supply chains, using input-output models and network theory. Keisuke is also a member of the nominating committee of the International Society for Industrial Ecology.



Dr Fabian Sack is an Honorary Associate with ISA. He has led a number of Australian water industry sponsored projects with ISA, including the first corporate ecological footprint calculation using an input-output approach, as well as Australian Research Council funded research into broadening and deepening the footprint methodology. Fabian has held senior private and public sector roles working on sustainability and stakeholder engagement in the Australian water, infrastructure and energy sectors. He has a PhD from Wollongong University on corporate environmental ethics and has contributed to a number of journal articles on water industry footprinting and the allocation of responsibility using input-output analysis.



Chia-Hao Liu is a visiting Ph. D. student from Cheng Kung University in Taiwan. His research interests include life cycle assessment, input-output analysis, data envelopment analysis and decomposition analysis. He works with Prof. Lenzen to advance his study in the methodology and application of IO-LCA. He is working on applying IO-LCA for environmental improvement and future policy-making regarding the electricity sector in Taiwan.

^ Education and Training

ISA Units of Study at the University of Sydney offered Semester 2, 2011

ISA Units are available as electives in the Master of Sustainability (MSust) Grad Cert and Grad Dip Sustainability which commenced in Semester 1, 2011.

Units of Study can be found at:

https://ssa.usyd.edu.au/ssa/handbook/uoslist.jsp?searchtype=S&page=1&academic_year=2010&sessionid=none&alpha=PHYS&digit=503&name=none°reeid=0&facalias=none&rows=100

The Master of Sustainability program can be found at:

http://www.science.usyd.edu.au/fstudent/postgrad/coursework/pgc_sustainability.shtml

If you would like further information please call Joy Murray on +61 (0)2 9351 2627 Wednesdays – Fridays.

ISA TBL Workshops

ISA's TBL workshops will resume in July 2011, with the first two-day course taking place on Thursday 14th and Friday 15th July. These workshops focus on the team's full supply chain TBL and Footprint accounting methodology. They also provide an introduction to Environmentally Extended Input Output Analysis (EEIOA) and show how IOA fits together with conventional life-cycle assessment (LCA).

Details about our workshops will be posted on our website in June, but please note the dates.

Alternatively, ISA offers on-site and/or customised courses. For more information please contact Joy Murray on +61 2 9351 2627

For more information or to book a place in the workshop please contact Joy Murray by email at joy.murray@sydney.edu.au

^ Consulting

Our aim is to continuously develop and improve in a multi- and inter-disciplinary way scientifically rigorous, quantitative, consistent and comprehensive approaches for Integrated Sustainability Analysis.

If you would like to know more about our consultancy services please contact us via email christopher.dey@sydney.edu.au or call Chris Dey (Tues-Fri) on +61 (0)2 9351 5979 hours 9:00 – 17:00 EST.

^ ISA TBL Software

ISA continues to develop an Excel-based software tool that is available under license. In terms of training we can provide an afternoon catch-up session for anyone who has previously undertaken BL³ training and would like to know more it. Please contact Joy Murray by email at joy.murray@sydney.edu.au

We will shortly announce release details for the next version of the tool. Please reply to christopher.dey@sydney.edu.au with software in the subject line if you want to register your specific interest.

Publications

Book: *The Sustainability Practitioner's Guide to Input-Output Analysis*

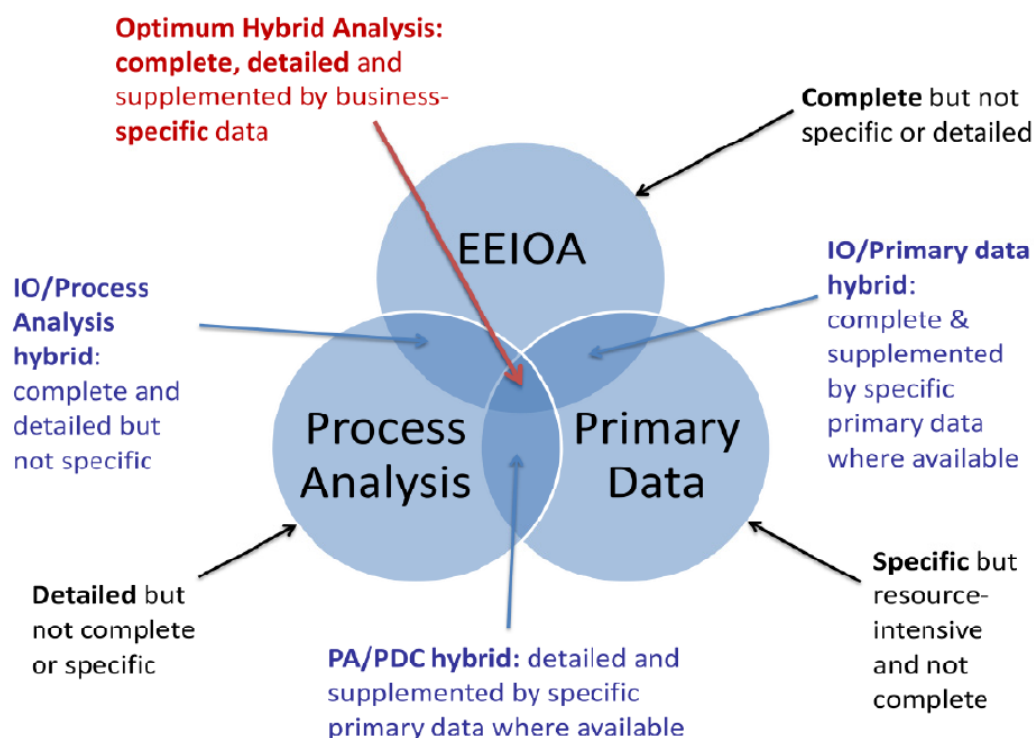
As part of ISA's contribution to the building of input-output expertise throughout the wider community, a new book aimed for the general reader was launched at the Input-Output Conference in Sydney in 2010.

The Sustainability Practitioner's Guide to Input-Output Analysis, published by Common Ground, includes chapters written by experts from Japan, New Zealand, UK, Europe and USA as well as Australia. It provides an introduction to input-output analysis, case studies of its use around the world and a collection of tools that are available to help the practitioner. It is designed for those with knowledge about the sustainability dilemmas we face but who are unsure about the *how* of measuring our impacts, tracking our progress and informing the decisions for a sustainable future.

For more information see publisher's website at <http://onsustainability.com/books/bookstore/>

New ISA Information Sheet (collaboration with CenSA UK):

Calculating Scope 3 GHG Emissions Using Optimum Hybrid Analysis (OHA). This information sheet was produced in response to a request for tender from the Greenhouse Gas Protocol Scope 3 Guidelines Working Group (of which ISA is a member). The diagram below summarises the way different LCA approaches work together. Input-output analysis is the perfect framework for linking in both process LCA and direct (primary) data from suppliers.



For more details see: http://www.isa.org.usyd.edu.au/research/InformationSheets/ISATBLInfo20_new.pdf

Other recent publications include:

Murray J, Wiedmann T and Dey C, Response to Corporate Carbon Performance Indicators Revisited, *Journal of Industrial Ecology* in press

Lenzen M and Murray J, Conceptualising environmental responsibility, *Ecological Economics*, **70**(2), 261-270, 2010

Lenzen, M. & Murray, J. (2010). Accounting for Carbon Flows: Comparing the principles of UNFCCC and the SEEA. *Society and Natural Resources* (in press)

Lenzen M and Peters G. (2010). How city dwellers affect their resource hinterland – a spatial impact study of Australian households, *Journal of Industrial Ecology*, **14**(1), 73-90.

ISA Report: *Forest Carbon – ownable financial product or global common good?*
<http://www.isa.org.usyd.edu.au/publications/reports.shtml>

▲ New research projects

The **Sustainable Islands project** of the ISA team at the University of Sydney is aimed at identifying the sustainability situation on 3 small, self-governed, and remote Pacific islands – [Yap](#), [Niue](#), and [Norfolk](#). In its first stage, this project participants will identify and compile key determinants and drivers of sustainability on the islands, such as population growth, age and skills structure, tourist arrivals and earnings, production structure, export earnings, foreign aid/support, annual imports and per-capita use of liquid energy carriers such as petrol and diesel, motor vehicle usage, public transport infrastructure and potential, electricity generation and consumption, energy demand structure, average incomes, fuel and electricity prices, and penetration and potential of renewable energy sources...

For more information please visit <http://www.isa.org.usyd.edu.au/research/islands.shtml>

▲ Who's using ISA research?

ISA models and results underpin many environmental calculators, website content, reports and other research:

- * [ACF Consumption Atlas](#)
- * [ACF Green Home](#)
- * [Energy Australia's Carbon Emissions and You](#)

▲ Feedback



▲ This email newsletter is produced by the Integrated Sustainability Analysis Group at the University of Sydney, Australia. You have received this copy because you have expressed an interest in our services or because your work is in a similar area. Please feel free to forward this email to anyone who might be interested. ☺ To [SUBSCRIBE](#) to the e-newsletter send a message to the address below with SUBSCRIBE in the subject to the email address below (see our [privacy policy](#)). To [UNSUBSCRIBE](#) email with UNSUBSCRIBE in the subject. Please email isa@physics.usyd.edu.au with any feedback you may have.
