

perspective

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Dear Reader,

SUSTAINABILITY
– a healing megatrend of our century or just another (very intellectual) front in the battle

between companies, lobbyists, activists and policy makers for the minds of the people?

There is considerable evidence for the first explanation in this issue: discover them through reading about the position and activities of EUROFER in the cover story, or examine the article ‘Sustainability occupies the executive floors’ about the European Business Ethics Network, or ...

What about PE? We believe and demonstrate in our day to day work that sustainability and long-term-success go hand in hand. We are fully committed to the concept of sustainability, and are expanding and extending our products and services (see articles on the upgrade of GaBi databases and on our new companies in Austria and Australia). And we are taking responsibility for our own activities: from 2006 we are operating on a fully CO₂ neutral basis!

Let us be your
Experts for SUSTAINABILITY!



Michael Betz
Managing Director of PE Europe

Steel and IPP – European steel industry initiative: promoting sustainable development through eco-design

The European Commission released a communication on IPP in 2003 to assess and improve the environmental performance of products over the life cycle, encouraging reuse and recycling of materials, without developing new legislation.

EUROFER is following the Commission’s activities and is pro-actively investigating the use of IPP to meet customer requirements, reduce steel products’ impacts and to promote the positive attributes of steel. EUROFER commissioned a project to develop eco-design packages for steel products, together with PE Europe and LBP.

The packages will focus on technical, environmental and legislative requirements, based on customer requirements over the products life cycle for use by the whole supply chain. Key customers were interviewed, and welcomed the opportunity for such discussions.

The valuable interviews highlighted differences in the legislative approaches between and within market sectors and throughout Europe. They also highlighted communication gaps and areas for improvement by the industry (e.g. greater collaboration with customers).

LCA is a key tool within IPP and is included in the packages. Using GaBi software, an LCI is being developed for each case study product: an office floor, a stainless steel roof and a tailor welded blank (automotive). IISI cradle-to-gate LCI data is currently available for intermediate products and is provided via steel companies and institutions, and more recently through the Commission’s ELCD. To provide a more accurate LCI, the IISI methodology is being developed, firstly to account for the closed loop recyclability of steel without deterioration of material properties and secondly to determine the burden associated with co-products that are produced in the steel making process and which are sold to other industries.

The final part of the project is to undertake a Material Flow Analysis of steel throughout Europe to develop accurate recycling rates, product lifetimes etc.

The steel industry is developing its own approach to IPP, with their customers’ opinions and requirements at the forefront of the work, to promote the environmental credentials and benefits of using the material steel.

For more information contact c.broadbent@eurofer.be.



Clare Broadbent
European Confederation
of Iron and Steel Industries,
EUROFER, Brussels

Client Statement

“After having analysed different available supporting tools we decided to use the GaBi 4 software and its sector specific databases for our work on environmental assessment and eco-design of vehicle security systems. Since then GaBi 4 has efficiently supported us to characterize the eco-profile of a specific product during its life cycle and to identify and validate alternative design solutions to reduce environmental impact.”



L. Thomazetto – COBRA Automotive Technologies



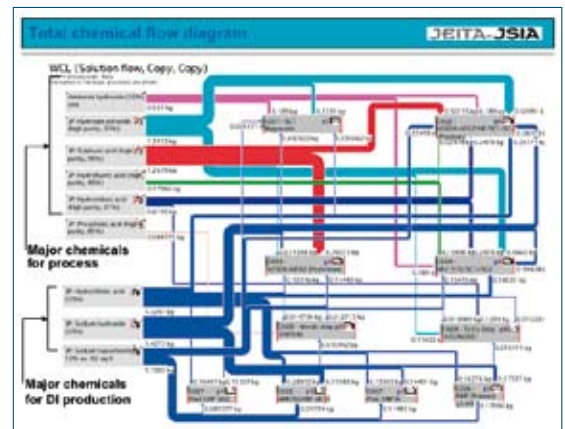
M. Pierini, M. Delogu – University of Florence – Department of Mechanics and Industrial Technologies

GaBi software in the Japanese Semiconductor Industry

The JEITA-JSIA (Japanese Semiconductor Industry Association) LCA working group presented the developed assessment model for energy and material consumption at the recent International Semiconductor Environmental Safety and Health (ISESH) 2006 conference (<http://www.esia-events.org>).

Easy-to-collect, on-site consumption data was utilized to make the environmental assessment by using parameters in GaBi. Furthermore, besides performing an environmental assessment, this model will give the user an opportunity to build up an optimisation scheme for energy and operating material usage.

More info: j.gediga@pe-europe.com



The GaBi plan shows the major chemical flows for the specific semiconductor process as well as the chemicals used for the deionised water process.

GaBi 4 Database Upgrade – we empower you for future tasks

What's new?

- › All GaBi 4 databases – lean, professional and extension databases – provide new LCI information (as part of the LCA database) based on data sources from 2002 – 2004.
- › 60 additional country specific power grid mix modules and the possibility to set up individual power grid mixes make GaBi 4 the most comprehensive LCA database on energy systems world-wide.
- › All 110 ELCD data sets of the first European LCI database are included. The basis of these data is information from the participating industry (EAA, ECI, EUROFER, FEFCO, PlasticsEurope) and PE/LBP background data. PE Europe, LBP (University of Stuttgart) and other partners enjoyed the confidence of the EU Commission in being chosen to set up the first European LCI database.
- › The database documentation format conforms to the ELCD standards and all documentation is already based on the standards defined for European LCI database.
- › Transportation processes are supplemented with the actual emissions standards. It is now possible to reflect different emission standards of vehicles (EU II, III, IV and V).

What has been adapted?

- › Energy supply chains and resources (such as oil, gas, coal, etc.) according to the country specific situation, in any important resource mining area
- › End-energy supply processes (such as power plants and refineries) in their country specific operation modes (adapted to new standards)
- › All major and many other speciality production processes in the fields of chemistry, plastics, metals, non-ferrous metals and precious metals (adapted to current technology standards)

What are the customer benefits

- › Quality - Consistency – Relevancy – Continuity have been the main drivers in the GaBi 4 database upgrade philosophy. The constant improvement and development of LCA databases in combination with the outstanding know-how of our experts ensures that this philosophy is sustained. This is what our customers expect and have relied on for more than 15 years. Close cooperation with many different industries across the life-cycle is the essential element



ment that guarantees an even greater usability and coverage.

- › Efficiency – Credibility – Utility – Reliability is what our customer hope for and what they receive with the GaBi 4 database upgrades. Keeping the upgrade together as one package, rather than releasing data bit by bit saves customers time and guarantees consistent results, because data fit together.

Take the chance for a “quantum jump” and get NEW data and MORE data starting in October.

More info: gabi@pe-europe.com

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+++ Nice to know: Every now and then we like to let you know about tips and tricks in GaBi 4 **+++ Did you know** that you can change the graphic size/appearance of processes by dragging the small black squares, called handles, which appear after clicking on a process instance? When

moving the handle, they jump to a certain grid in order to facilitate the orientation of graphical elements. This will also work when moving process instances. The grid size can be set with the GaBi options. Hold down the “Alt” key to turn off the grid. **+++ Did you know** that you can

access the database process on which a process instance is based by holding down the “Ctrl”-key and double clicking on the process instance, or by right-clicking and selecting “Details”? **+++**

New manager of LCA Centre Denmark



Jan Poulsen has been appointed as Head of LCA Centre Denmark after Jeppe Frydendal moved to a position at Eco-labelling Denmark. Jan Poulsen has worked with LCA and life cycle thinking for several years and is one of the leading experts for LCA software in Denmark.

LCA Centre Denmark is a knowledge centre for life cycle assessments (LCA) and the life cycle approach and PE's partner for GaBi software. The centre promotes product-oriented environmental strategies in private and public companies by assisting them to implement life cycle thinking.

LCA Centre Denmark is partly funded by the Danish Environmental Protection Agency and is managed by IPU, COWI and FORCE Technology.



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PE and its cooperation partner Five Winds International will be participating at the InLCA/LCM in Washington (October 4-6, 2006) having an exhibition and presenting various papers.

Harald Florin will present PE's view on "Life Cycle Assessment (LCA) as part of Life Cycle Management (LCM) in daily application within corporations" and Marc Binder will talk about "How to provide LCA information of building materials in an efficient way" and will give answers to the question: "Are alternative fuels a major step towards a sustainable road transportation of tomorrow?"

The first "jumps" of PE in Australia



Picture source: Photocase.com

After opening the new subsidiary PE Australia, PE's experts for sustainability started their activities "down under". PE Australia's Director Simon Whitehouse co-organised the Alternative Transport Energies Conference in Perth in September 2006, and fellow Director Michael Faltenbacher contributes with a presentation on ecological evaluation on future transport fuels.

The next step will be a two week road-show in late September covering Perth, Melbourne, Canberra and Sydney. The company, as well as the sustainability products and services and its variety of possible applications will be introduced to industry representatives and organisations including the Australian Greenhouse Office and the Australian Business Council for Sustainable Energy.

PE Australia is in a perfect position to offer a wide range of custom-tailored services in areas ranging from Life Cycle Assessment to GHG Accounting to the development of sustainability strategies. If you wish to know more about PE Australia's services or to meet the Directors, please contact s.whitehouse@pe-australia.com.au, phone: +61(o) 418947590 or m.faltenbacher@pe-australia.com.au.

Hungary: LCA is growing up

"In Hungary LCA still walks in children's shoes", as local experts say. FEBE ECOLOGIC, LCA consultant and GaBi sales partner, is active in raising awareness and in diffusion of LCA knowledge, collaborating with the main actors in the Hungarian LCA community. Since the Hungarian "eco-exhibition" ÖKOTECH 2005, where PE Europe was present, two main events in 2006 warrant a mention:

- › The workshop on "Environmentally Conscious Product Design" in Budapest, organized by KÖVET-INEM Hungária (Hungarian Association for Environmentally Aware Management), involved interested parties in dealing with improvement possibilities in product environmental performance.

- › The 2nd Hungarian LCA conference held at BAYLOGI (Bay Zoltán Institute of Logistics and Production Engineering) in Miskolc



with the participation of representatives from research, government and companies, also focused on the implications of the EuP directive.

In both events LCA case studies were presented by FEBE to highlight the possible driving forces and benefits for companies. In Miskolc a short training and hands-on exercise on GaBi 4 software was held.

Let's continue to work together for the future of LCA in Hungary!

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Greening Supply Chains in Taiwan

The first "Green Supply Chain Exhibition 2006" held on 5 – 7 September 2006 in Taipei was organized by the Plastics Industrial Technology Development Center and the Taipei Computer Association. The main visitors were companies exporting their products to European countries and interested in subjects such as RoHS, WEEE and EuP.

The exhibitors were suppliers of Green materials, Green components, Green technologies and Green products and service providers for products testing & analysis, management consulting, etc.

PE participated in this event represented by Guttech International Corp.



Calendar and Outlook



PE Europe invites you to an EcoDesign workshop (<http://www.care-electronics.net/Clo6>) at the CARE Innovation 2006 conference on "Electronics and the Environment" in Vienna (Nov. 13–16, 2006). Experts from industry, research and NGOs will discuss sustainability questions, environmental tools, LCA, data questions, eco-design and issues of the new EuP directive in the electronics branch. PE will participate with an exhibition booth and two invited sessions on "The Ecodesign of EuP Directive – Theory and Practical Examples" and "Ecodesign Toolbox for Energy Using Products in the System 'House'".



PE will be present at the Greenbuild in Denver (November 15–17, 2006). Please visit us at our booth #536. We will be happy to discuss with you our perspective on sustainable construction, what is happening in Europe (e.g. Environmental Product Declarations (EPD) of construction materials), how LCA and LEED fit together and how our LCA tool GaBi 4 can support you to efficiently answer questions about how to move towards a sustainable world.



EcoBalance

The 7th International Conference on Eco-Balance will take place in Tsukuba, Japan, November 14–16, 2006. Dr. Martin Baitz is a member of the International Advisory Board and PE will contribute to the conference with two presentations entitled "Biofuels in Life-cycle Practice; Intermediate Step or Final Goal towards Sustainable Road Transport?" and "LCA software requirements of companies/associations with distributed data providers – are consistency and multi-user approaches compatible?"

» Fairs » Events » Dates 2006

In the table below you will find up to date information, when and where we and the employees of our cooperation partner will be present on exhibitions, conferences, etc. Make use of the opportunity to meet us there and arrange an appointment. Our contributions to the events are indicated by an "X". Abbreviations: P = Presentation › W = Workshop › B = Booth

Event	Location	Date	Contact person(s)	P	W	B
Hydrogen fuel cells and alternative transport energies conference	Perth (AU)	11 – 13 Sep 2006	Johannes Gediga Michael Faltenbacher Simon Whitehouse	X		X
2006 ConAccount meeting	Vienna (AT)	13 – 14 Sep 2006	Julia Pflieger (LBP) Robert Ilg (LBP)	X		
EBEN Annual Conference: Ethics in and of global organisations	Vienna (AT)	21 – 23 Sep 2006	Robert Gabriel Sandra Mayerhöffer Satya Rischka	X		X
FED Conference	Kassel (DE)	21 – 23 Sep 2006	Constantin Herrmann Alexandra Saraev	X		X
The Amsterdam global conference on sustainability & transparency	Amsterdam (NL)	04 – 06 Oct 2006	Robert Gabriel Sandra Mayerhöffer			X
InLCA / LCM 2006	Washington DC (US)	04 – 06 Oct 2006	Marc Binder Harald Florin Cecilia Makishi (LBP) Matthias Fischer (LBP)	X	X	X
Bau SIM	Munich (DE)	09 – 10 Oct 2006	Robert Ilg (LBP) Anna Braune (LBP)	X		X
Renewable Energy 2006	Makuhari Chiba (JP)	09 – 13 Oct 2006	Maiya Shibasaki (LBP)	X		
22 nd International Battery, Hybrid and Fuel Cell Electric Vehicle Symposium and Exposition (EVS)	Yokohama (JP)	23 – 28 Oct 2006	Masahiro Osumi Johannes Gediga	X		X
SETAC North America Annual Meeting	Montreal (CA)	05 – 09 Nov 2006	Marc Binder Johannes Kreißig Anna Braune (LBP)	X		
ECOMONDO	Rimini (IT)	08 – 11 Nov 2006	Emanuela Scimia Balázs Sára (FEBE ECOLOGIC)			X
Material, Minerals & Metal Ecology 06 – "The technological solution to sustainability"	Cape Town (ZA)	14 – 15 Nov 2006	Johannes Gediga Julia Pflieger (LBP)	X		
7 th International Conference on EcoBalance	Tsukuba (JP)	15 – 16 Nov 2006	Martin Baitz Maiya Shibasaki (LBP)	X		
Care Innovation	Vienna (AT)	13 – 16 Nov 2006	Constantin Herrmann Alexandra Saraev Michael Held (LBP)	X	X	X
Greenbuild 2006	Denver (USA)	15 – 17 Nov 2006	Marc Binder Johannes Kreißig			X
International Conference on Green and Sustainable Innovation 2006	Chieng Mai (TH)	29 Nov – 1 Dec 2006	Michael Betz	X	X	X
13 th SETAC Europe LCA Case studies symposium „Environmental Product Declarations with focus on the Building and Construction Sector“	Stuttgart (DE)	7 – 8 Dec 2006	Johannes Kreißig Cecilia Makishi (LBP) Anna Braune (LBP)	X		

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