Life Cycle Initiative

A joint organisation of
UNEP and SETAC

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LC Net • Newsletter of the Life Cycle Initiative

Life Cycle Events, Announcements and more! November/December 2015 Edition

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LC Net Focus

Mainstreaming Life Cycle Thinking at LCM 2015

LCM 2015
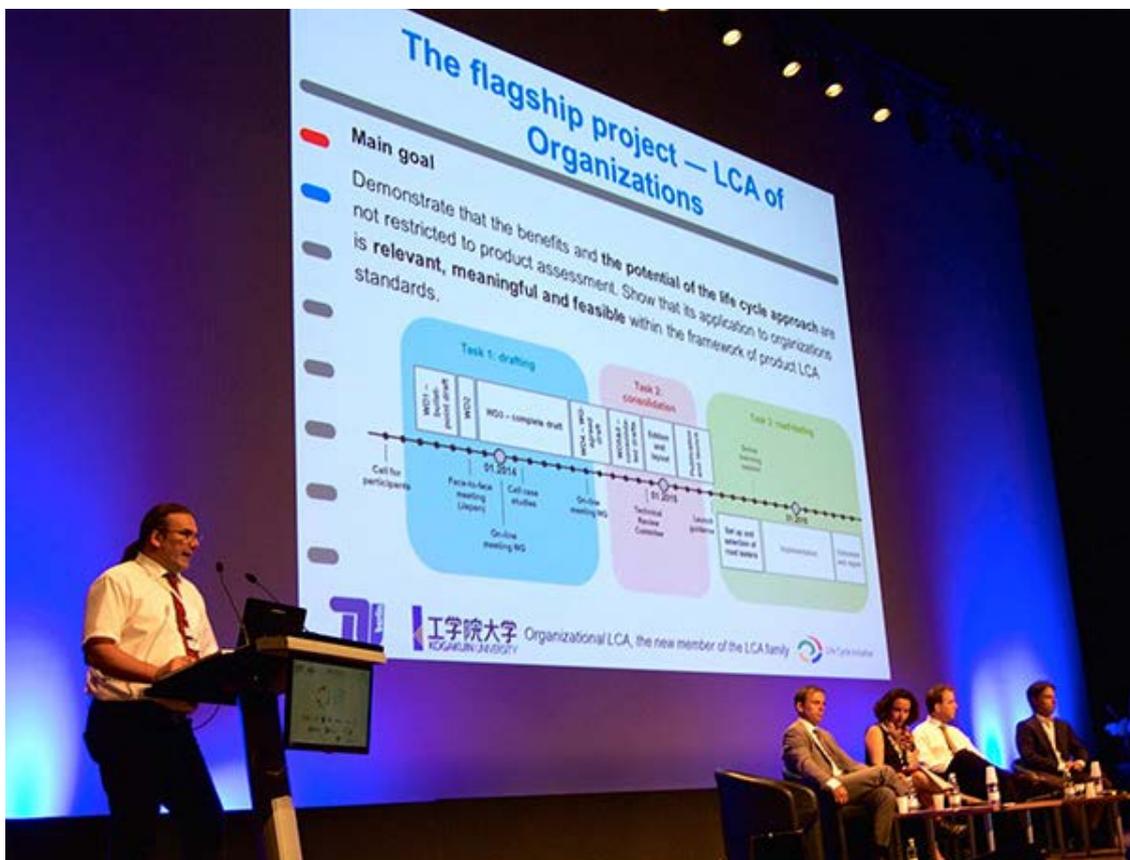30 August -02 September
Bordeaux, FRANCE

Mainstreaming Life Cycle
Management for Sustainable
Value Creation

The theme of this 7th International Conference on Life Cycle Management (28 August - 2 September 2015 in Bordeaux, France) was "Mainstreaming Life Cycle Management for Sustainable Value Creation". The Initiative presented several flagship projects relevant to this line.

The Initiative presented how Life Cycle Management (LCM) can and is being adopted by small- to medium- sized enterprises (SMEs) thanks to its Life Cycle Management Capability Maturity Model (LCM-CMM). This was illustrated with practical examples from pilot phase companies in India, Colombia and South Africa.

30 experts from 14 developed and developing countries discussed the data review and conformance criteria to Global Guidance Principles. The Initiative also presented its work on Organizational Life Cycle Assessment (O-LCA), including its recently launched Guidance, which aims at developing common practices and standards for life cycle assessments of organisations. The Initiative also presented the results of its leading effort to map and assess over 40 hotspots analysis methodologies.

Life Cycle Thinking now required in ISO 14001

The International Organization for Standardization (ISO) is the world's largest developer and publisher of International Standards. ISO 14001 is one of the world's most widely used standards for environmental management. First published nearly 20 years ago, it was revised in 2015 by the technical committee "ISO/TC 207/ SC1" in charge of developing global environmental management system standards for organizations.

The addition of a "life cycle perspective" is one of the key improvements. It is an expansion of previous requirement to include consideration of environmental impacts from products or services during delivery, use, end of life treatment and final disposal. This will help organizations to contribute to sustainable development by using a "life cycle perspective" to prevent environmental impacts from being unintentionally shifted elsewhere within the life cycle.

A life cycle assessment is not required but an organization, whatever its size, type, products or services, needs to think carefully about the life cycle stages that it can control or influence. The life cycle stages that apply will vary depending on the context of the organization and its specific activities, products or services. A three-year transition period to ISO 14001:2015 has been set for certified organizations.

ISO has been a strategic partner of the UNEP/SETAC Life Cycle Initiative for many years, bringing its views as a standard setter and collaborating in many of the Initiative's activities particularly around methodological and capacity development worldwide.

More information on changes in ISO 14001 on ISO /TC207 / SC1 website.

Our Calendar: Where we and our partners will be in the coming months

For a full calendar of life cycle events, see our *Events page* on our website.

5th International Conference on Green and Sustainable Innovation (ICGSI 2015)

8-10 November 2015 - Pattaya, Thailand

Llorenç Milà i Canals, from the Initiative, will lead a keynote about "Integrating Life Cycle Thinking in Sustainable Consumption and Production for a Green Economy: update on UNEP activities". Jim Fava, co-chair of the Initiative's hotspot analysis flagship activity, will speak on "How can we create both environmental and social improvement and business value from use of life cycle information". They will both animate a workshop on potential collaboration activities in South East Asia, with a focus on capacity development, LCA data, and hotspots analyses at different levels, and will be disseminating the importance of Life Cycle Thinking and the Initiative's activities together with volunteers from the host organizations Kasetsart University and MTEC. Join them at the Life Cycle Initiative booth!

More information **here**.

9th Australian Life Cycle Conference Series

Agrifood LCA: 23-24 November • LCM Australia: 24-25 November • AusBuildLCA: 26-27 November 2015 - Melbourne, Australia

Our own Jodie Bricout will be available to respond to any questions about the Life Cycle Initiative and explain the latest Initiative publications in a dedicated space kindly offered by the conference organizers.

More information **here**.

Announcements

Including abstract deadlines, publications, and other interesting news

Training material for developing LCM capability now available

The Initiative is delighted to announce the launch of a final version of the "Life Cycle Management-Capability Maturity Model" (LCM-CMM) material, after a review process involving its lead author (Professor Tom Swarr), input from trainees, and comments from the life cycle community through the Initiative's website.

The aim of the "LCM-CMM" is to focus on capability development and implementation to

fully operationalize and mainstream LCA in product development, marketing, and strategic decision-making in business.

From a practical point of view, this approach aims at continuously raising the organizational maturity of an entity and its suppliers in order to make value chains more sustainable. To make that happen, the capability framework divides sustainability concepts into smaller elements, with specific objectives tailored to the current state of knowledge and practice of the organization.

The LCM-CMM Workbook and the training slides are now freely available for download.

Call for abstracts to SETAC Europe 26th Annual Meeting

The 26th Annual Meeting of the Society of Environmental Toxicology and Chemistry (SETAC) unit in Europe. The 2016 edition, held in Nantes, France, in 22-26 May 2016, will be dedicated to "Environmental contaminants from land to sea: continuities and interface in environmental toxicology and chemistry".

Abstract submission is open until Wednesday 25 November 2015, 23:59 CET.

If you join SETAC Europe 2016, let's keep in touch! The Life Cycle Initiative will lead 3 sessions:

• From streamlining LCA to new concepts of hotspots analysis;
• Life cycle data developments;
• Consensus building in life cycle impact assessment.

A two-day, back-to-back workshop will be dedicated to international discussions on data conformance and review (See Flagship activity feedback Section).

Call for inputs on LCA databases and datasets

Please contribute and provide inputs on the two following projects:

Databases Conformance Criteria

The Life Cycle Initiative has developed conformance criteria for Life Cycle Assessment databases. The objective is to allow assessment of the practical conformance of a given LCA database to the "Global Guidance Principles on LCA Databases". **To get involved, click here!**

Datasets review criteria

Within the context of technical support on review to three countries, UNEP, with the help of the UNEP/SETAC Life Cycle Initiative, has supported the development of a set of international review criteria for LCA datasets. **To get involved, click here!**

Please send your comments by **15 December** to consultations (at) lifecycleinitiative.org. Your feedback will be included in the next discussions in SETAC Nantes.

See the Flagship activity section for more information about databases and datasets.

Survey on LCA best practices

How is Life Cycle Assessment implemented in different countries? Wladmir Motta, coach for LCM CMM pilot projects is conducting a survey to explore this question as part of his PhD research. The objective is to get a picture of best practices worldwide, and how it can be adapted in the Brazilian context. Results will be shared in LC Net's July-August 2016 issue.

Please contribute by 14 November. The survey takes a maximum of 10 minutes to complete.

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Flashback: Recent Life Cycle Initiative Events & Activity

4th Indian conference on Life Cycle Management (ILCM) 2015 - 14 -15 September 2015 - New Delhi, India

ILCM is the main platform in the region covered by the South Asian Association for Regional Cooperation (SAARC) for the global LCA community. Organised by the Federation of Indian Chambers of Commerce and Industry (FICCI), it aims at raising national awareness on the relevance of life cycle thinking for sustainable businesses. ILCM 2015 included a panel discussion on "Life Cycle Costing and Public Procurement Policy in India" to develop understanding of the subject and enable a state planning policy framework for India. The Bureau of Indian Standards (BIS) conducted a session to encourage Indian industry to participate in standards formulation and review activities.

ILCM 2015 concluded with a "Consultative Meet" to develop a common understanding among multiple stakeholders on benefits of developing Indian datasets and defining next steps over the coming two to five years.

Global Dialogue 2015 on Safe and Secure Handling of Hazardous Materials – 17-18 September 2015 - Colombo, Sri Lanka

Risks and hazards in the chemical industry were the focus of this international conference organised by Sri Lanka's ministry of Industry and Commerce, Geocycle Sri Lanka (HolcimLafarge Group), and The Organization for the Prohibition of Chemical Weapons. It

was in line with the government's objective to drive organisations towards sustainable development.

In the inaugural keynote, Llorenç Milà i Canals, from the Initiative, provided the big picture of sustainable chemical management, and its links with life cycle thinking; these views were further developed by members of the Sri Lankan LCA and Ecodesign Network Mr Chalaka Fernando, Dr Parakrama Karunarathne and Mr V.R. Sena Peiris. Sessions covered hazardous chemicals and the triple bottom line, regulatory and occupational safety and health frameworks, supply chain, waste management & safe disposal, sustainable applications, and best practices.

On the same occasion, the Ministry of Environment hosted a roundtable discussion on Integrating LCA into Sri Lanka policy framework, which gathered many actors involved in this process including the Sri Lankan SWITCH-Asia project representatives.

Life Cycle Thinking at the World Resources Forum 2015 - 15 October 2015

The most discussed topics were resource efficiency and circular economy, for which life cycle thinking-based approaches are essential tools.

Sonia Valdivia, co-chair of the Life Cycle Initiative's Global Capability Development flagship activity, spoke about the mainstreaming potential of LCA in emerging and developing economies. The UNEP eco-innovation project presented a practical way of engaging SMEs in developing countries to mainstream sustainability into their businesses through life cycle thinking based on the examples of on-going projects in nine countries from Asia, Africa and Latin America.

The fourth Global Network Conference on Resource Efficient and Cleaner Production (RECP), which took place in parallel to the forum, held a parallel session organized by UNEP on life cycle approaches for businesses, in which Fayçal Boureima represented the Life Cycle Initiative. The session dealt with possible life cycle approaches for measuring impacts, identifying risks and business opportunities. It was illustrated by examples and case studies.

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Flagship Activity Feedback - A selection

Data and Databases – The Blessing and Bane of LCA

Data – every practitioner needs them and quality LCAs depend on them. It's been a running topic in LCA for over 30 years. Many advances have been made and data are easier to access than ever before (see our life cycle databases map). But there is still a number of challenges to address in order for most existing LCA data to be easily accessible from your LCA software, with sufficient and credible information that will enable you to make a sound decision on whether a given dataset is fit for your specific study or purpose.

Building a Global Network of Interoperable Life Cycle Assessment databases

The ambition of this on-going governmental-led initiative is that by 2017, LCA practitioners will be able to seamlessly access the majority of existing LCA data, including data from LCA software. This project is steered by 13 governments with interest in LCA data. It involves a large network of technical experts, with the support of UNEP as Secretariat. Main work areas include defining the network architecture and technology, a common nomenclature and a common list of "meta-data" indicators. "Meta-data" is often referred to as "data about data" and ties in strongly with the areas of work on dataset review and conformance criteria detailed below. The next annual meeting of the Global Network will gather around 50 experts and stakeholders in Brasilia on 14-15 March 2016.

Building capacity globally, focusing on interoperability

Since 2012, UNEP has answered to developing countries and emerging economies requests regarding the generation and documentation of datasets. As a neutral institution, UNEP cannot support any specific commercially available data format or database; therefore, the main goal and condition of UNEP technical assistance focuses on LCA database interoperability, and UNEP is engaging the main actors in LCA data provision. In this way, in 2015, three countries have been supported in their national efforts: Malaysia; Thailand and Brazil.

UNEP aims at collaborating with all international actors in this area. For example, UNEP is collaborating with a LCA Database capacity development project led by Ecoinvent and funded by the Swiss Economic Cooperation agency (SECO) in India, Brazil and South Africa, and providing the big picture around LCA databases interoperability. The recent announcement by thinkstep of their release of ca. 2,000 datasets for developing countries to exploit in their national databases also opens new potential opportunities for collaboration.

Defining guidelines for LCA dataset review

The objective here is ultimately to lead to better quality and better-documented datasets for the user. Distinct from study critical review, this activity focuses on LCA dataset review. This is a UNEP led activity supported by the co-chairs of the Initiative Flagship project "Data and database management" as review criteria and process coordinators. UNEP and the European Commission are supporting the development of review criteria and procedures. These need to be transparent, consensus-based, and efficient. Criteria development and application also need to benefit from the experience of database managers, who have been developing and applying reviews internally. This work has to take into account the sensitive issue of confidential information for businesses and trade. UNEP and the review coordinators gratefully acknowledge the great contribution of the numerous LCA experts who are currently testing a first draft of criteria and processes for 40 datasets of the Malaysia, Thailand and Brazil national databases.

Operationalizing LCA databases guidance principles

Published in 2011, the Global Guidance Principles for LCA databases remains a highly relevant reference. Making these principles operational is the current focus of the UNEP/SETAC Life Cycle Initiative Flagship Project "Data and database management". This objective is pursued through the development of training material and the organisation of training events and dissemination, enabling new entrants as well as veterans to be well informed of good practices. The development of a practical set of criteria, called "conformance criteria", is also underway: the conformance assessment of a

given LCA database through this set of criteria will enable users to see at a glance if the overarching principles and practices are consistently applied. The LCA database community is involved in finding a consensus around those conformance criteria.

Please provide your comments on the draft proposal of Conformance Criteria **by 15 December** here.

International discussions on conformance and review will continue in a two-day workshop organized back to back with SETAC Nantes (22-26 May 2016).

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Secretariat of the UNEP/SETAC Life Cycle Initiative

For more information, please visit our website, or feel free to contact us by email.