

JLCA Corner

Current Activities of the Life Cycle Assessment Society of Japan

Katsuyuki Nakano*, Chie Nakaniwa, Takehisa Kabeya, Tadao Iguchi and Ryosuke Aoki

LCA Development Office, Japan Environmental Management Association for Industry (JEMAI), 2-2-1, Kajimachi, Chiyoda-ku, Tokyo, 101-0044, Japan

* Corresponding author (nakano@jemai.or.jp)

DOI: <http://dx.doi.org/10.1065/lca2007.10.360>

1 Outline of the JLCA

The Life Cycle Assessment Society of Japan (JLCA) was established through a collaboration between industry, educational institutions and the administration in 1995. It promoted the Japanese LCA National Project from 1998FY to 2005FY, and has developed LCA infrastructure, especially for industry. Collaboration between the Institute of Life Cycle Assessment, Japan (ILCAJ) and the JLCA has continued since 2004. As of October 2007, the JLCA is organized by about 362 members including 43 industry associations, 3 other societies, 197 businesses, 68 individuals, and 51 university research organizations. About 1000 registered users access the JLCA database. At present, the JLCA focuses its activities on the following four main areas.

2 Enhancing the JLCA-LCA Database

At the first term of the LCA Project, implemented from 1998FY to 2000FY, the LCA database and the Life-cycle Impact assessment Method based on Endpoint modeling (LIME) were developed [1]. At the second term of the LCA Project, the LCA database and the LIME were enhanced. Thanks to the projects, voluntary activities of industry associations and survey conducted by the JLCA, the number of data of the JLCA-LCA database was increased to 333 industry-based inventory data and 378 surveyed data.

3 Information Service

The JLCA Newsletters consisted of latest LCA activities in Japan are published periodically four times a year and distributed via mail services. The English version Newsletter is also published twice a year [2]. In addition, LCA-related seminars are held (some co-hosted by the ILCAJ) and more than 100 people participate in each seminar.

4 JLCA Award

Since 2004, the JLCA has presented the Awards in order to recognize the outstanding contribution to LCA activities as shown in Table 1. The awarding ceremony is held in December at the Eco-Products Exhibition, which is the largest eco-related exhibition in Japan. The award-winning activities are not only 'research activities' but also 'actual application for integration to business process' and 'promotion and public relation activities' on LCA. The Incentive Awards are also provided to the second-winners.

Table 1

Year	Award Winners
2004	JLCA President Award Toyota motor corp. Environmental Affairs Division 'Introduction of LCA activities to the vehicle development process (Eco-VAS (Eco Vehicle Assessment System))'
2005	METI-ISTPEB Director-General Award Canon Inc. Global Environment Promotion Headquarters 'LCA practices for business activities and all Canon product genres, and release of environmental information' JLCA President Award Industrial Research Center of Shiga pref. 'LCA promotion activities in Shiga prefecture'
2006	METI-ISTPEB Director-General Award Japan Iron and Steel Federation 'Establishment and diffusion of LCA database on iron and steel industry' JLCA President Award Seiko Epson Corp. 'Environmental product development based on LCA'

* METI-ISTPEB: Minister of Economy, Trade and Industry, Industrial Science and Technology Policy and Environment Bureau.

5 New Activities in the JLCA

5.1 LIME2 working group

LIME, the Japanese life cycle impact assessment method, was upgraded to LIME2 as the result of the second term of the LCA project. LIME2 measured the uncertainty of all of the damage factors in order to improve the reliability of the LCA result. Furthermore, health impact of indoor air pollutants and noise can be taken into consideration in the framework of the assessment. To examine a practical applicability in various business fields, the LIME2 working group chaired by Prof. Dr. Norihiro Itsubo was composed of eleven companies organized in September 2007 and launched into the study.

5.2 LCI data exchange system working group

The Life Cycle Inventory (LCI) database of the JLCA has developed through the LCA Project, but the number of stored data is still insufficient for precise calculation and the lack of LCI data is the major challenge for LCA practitioners. The working group chaired by Prof. Dr. Masahiko Hirao was composed of twelve organizations in September 2007 and has launched the study of the system to exchange LCI data smoothly throughout a product supply chain in order to improve their reliability.

References

- [1] Narita N, Nakahara Y, Morimoto M, Aoki R, Suda S (2004): Current LCA Database Development in Japan – Results of the LCA Project. *Int J LCA* 9 (6) 355–359
- [2] JLCA: JLCA Newsletter: <<http://www.jemai.or.jp/english/lca/>>