For Quantitative Environmental Product Information

Eco-Leaf

Environmental declaration

Product Environmental Aspects Declaration
ECO LEAF
製品環境情報
http://www.jemai.or.jp

Japan Environmental Management Association for Industry
Eco-Leaf TypeⅢ Environmental labelling program Office

"EcoLeaf environmental declarations use the LCA method to quantitatively show environmental information for all life cycle stages of products."

How EcoLeaf Was Developed

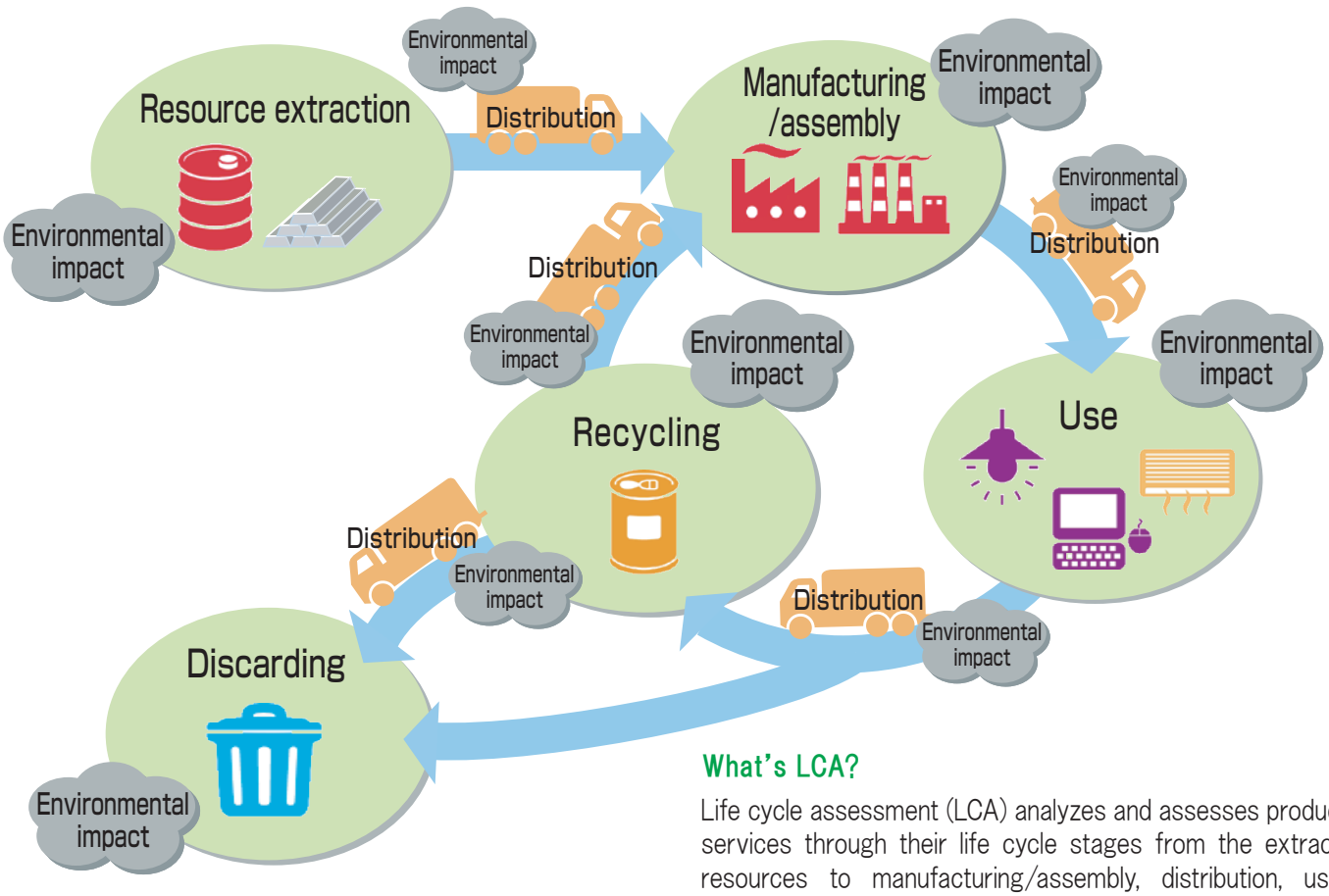
The investigation regarding the way for Japan to combat global warming was conducted in 1998 and the EcoLeaf environmental declaration was developed as the results of conclusions reached in discussion on what environmental declarations should be like in an environmentally friendly society. It is a new made-in-Japan environmental declaration whose full implementation started in April 2002, which is in conformity to ISO type III environmental declarations (ISO 14025).*

EcoLeaf Overview

EcoLeaf environmental label use the LCA method to quantitatively show environmental information of products through life cycle stages from the extraction of resources to manufacturing/assembly, distribution, use, and discarding/recycling.

-Why the environmental information of products through their life cycle stages is required to be disclosed? -

These days one often sees "eco-friendly products" and products that are termed "environmentally compatible." The only way to see if a product is truly "eco-friendly" is by assessing it to see if its environmental impacts are lessened through all stages of its life cycle. A method often used these days to assess the environmental impacts of a product in all its life cycles is life cycle assessment (LCA).



What's LCA?

Life cycle assessment (LCA) analyzes and assesses products and services through their life cycle stages from the extraction of resources to manufacturing/assembly, distribution, use, and discarding/recycling according to a method that anticipates environmental aspects and potential environmental impacts.

"The EcoLeaf environmental label facilitates good communication between businesses and buyers/consumers to bring about an environmentally friendly society."

EcoLeaf Constituent Elements

EcoLeaf environmental declarations are made publicly available using three forms:
(1) Product Environmental Aspects Declaration (PEAD)
(2) Product Environmental Information Data Sheet (PEIDS)
(3) Product Data Sheet (PDS)

1. Product Environmental Aspects Declaration (PEAD)

In addition to primary information about a product, the PEAD presents the main environmental impacts in an easy-to-understand manner based on PEIDS data.

(1) Global warming impact (CO_2 equivalent)
(2) Acidification impact (SO_2 equivalent)
(3) Energy consumption (MJ)

And others.

Form 1 (F-01s-02)

Product Environmental Aspects Declaration

Air Conditioner (PCR-ID : XX-01)

ECO LEAF 製品環境情報 http://www.jemai.or.jp

No. XX-YY-ZZZ

Publication Date: mm / dd / yyyyy

ABC

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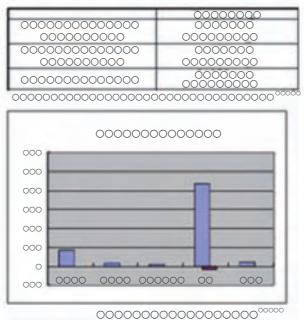


Use of EcoLeaf Declarations after Acquisition, and Examples of Effectiveness

Sales Promotion

- We use it in corporate image advertising to show that our company is actively managed in an environmentally friendly way.
- Our sales activities were facilitated when EcoLeaf adopted in the purchasing guidelines for municipalities.
- Our sales division now uses EcoLeaf to differentiate our products.

Company Regime

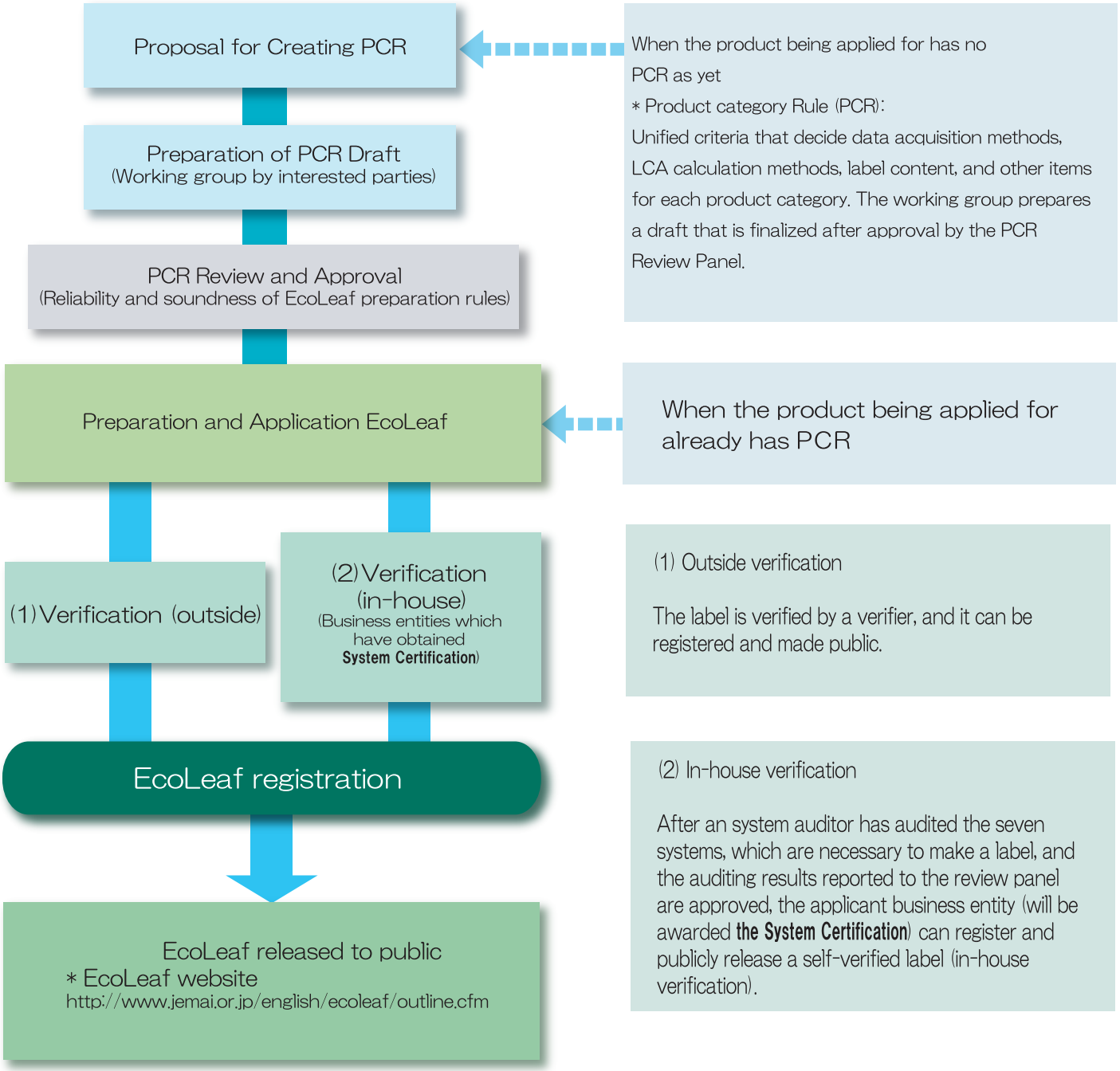
- We're now able to compare the environmental impacts of our own products, and we now have definite goals for more eco-product design (DfE; Design for Environment).
- We won the President's Award for recognition of our achievement of increasing concern for the environment in the company.

Others

- As prizes to retailers for sales campaigns, we chose EcoLeaf products from among many others and used them as a means to show how we are serious about the environment.
- The municipality recognized our active incorporation of environmental considerations into company management, and gave us an environment prize. This was a big topic among the public.

"The EcoLeaf environmental label program provides a mechanism allowing businesses to make highly trustworthy declarations more economically and faster."

Process from application for an EcoLeaf declaration until it is made and released.



"The EcoLeaf environmental declaration helps businesses operate in an eco-friendly manner through active information disclosure on the internet and other media."

2. Product Environmental Information Data Sheet (PEIDS)

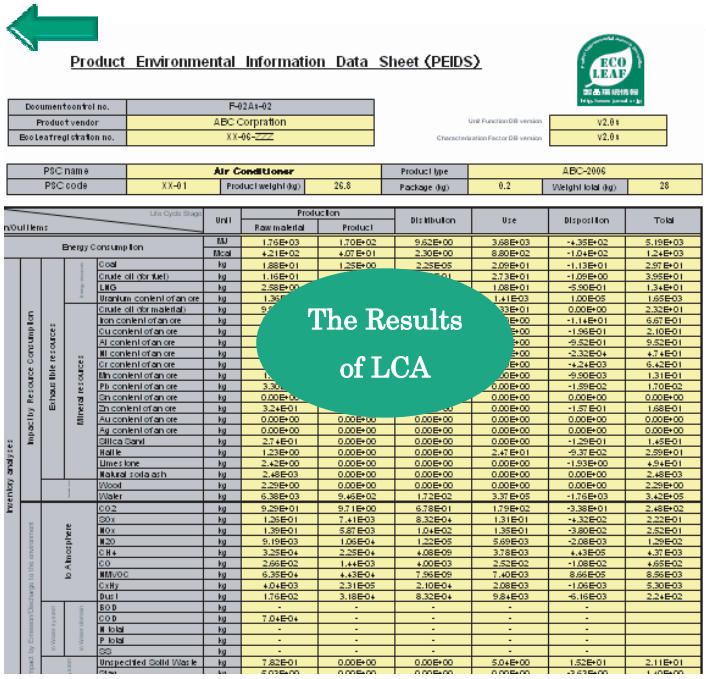
The results of LCA

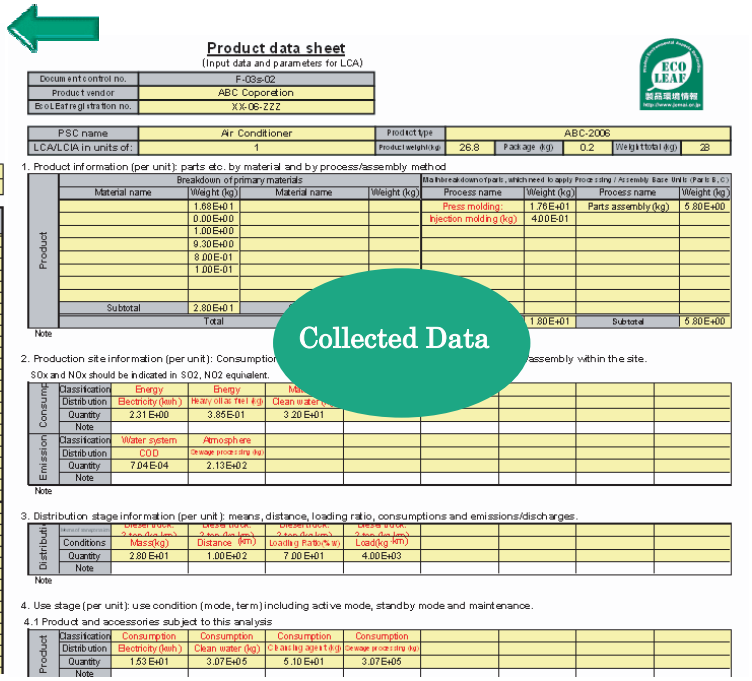
Compiles the results of inventory analyses and impact assessments for all life cycle stages.

3. Product Data Sheet (PDS)

Collected Data

Gives product information and the energy and material mass inputs/outputs per life cycle stage and per unit product (LCA input data).





■ Registered logo and how it is used

No. XX-04-001

Product registration number

The logo with the registration number shows that this product has qualified.

Website http://www.jemai.or.jp/english/ecoleaf/outline.cfm

You can view detailed data for each product registration number.

■ EcoLeaf Public Release

- An EcoLeaf environmental declaration that is approved is given a product registration number and released. With the product registration number, anyone can obtain all the information about an EcoLeaf environmental declaration from the EcoLeaf website.
- Businesses with registered declarations can show them to the public by posting on their websites, affixing them to their products, putting them in their catalogs, or by other means.

“The EcoLeaf declaration only provides the public with objective information and data, the assessment of which is up to declaration users.”

EcoLeaf-Applicable Products and Services

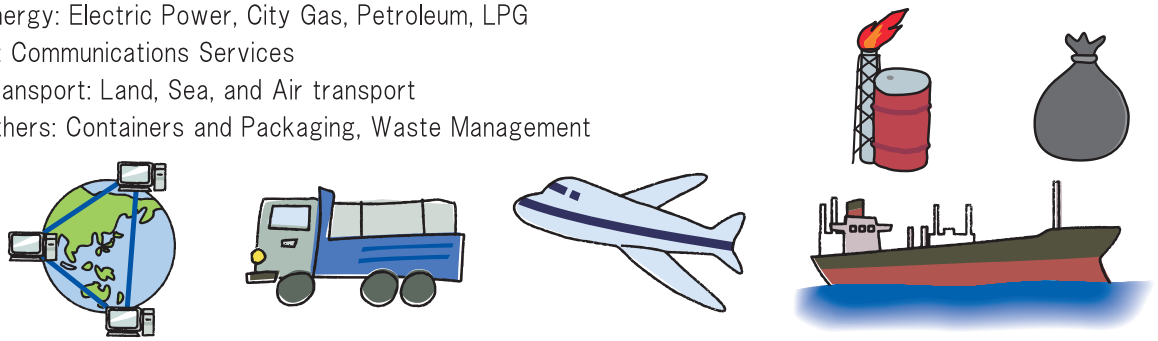
The EcoLeaf environmental declaration is a future-oriented environmental label that uses LCA to provide a multifaceted view of the environmental characteristics of products and services, including those whose environmental information is difficult to assess with a single criterion.

Examples of Products

- Electrical/Electronic Products: Consumer Appliances, IT Equipment, Office Equipment
- Machinery: Automobiles, Transport Equipment, Machine Tools, Precision Machinery
- Materials and Parts: Steel, Nonferrous Metals, Plastics, Glass, Cement
- Construction: Architecture, Civil Engineering, Building Materials, Housing Equipment
- Others: Everyday Articles, Stationery, Office Supplies.

Examples of Services

- Energy: Electric Power, City Gas, Petroleum, LPG
- IT: Communications Services
- Transport: Land, Sea, and Air transport
- Others: Containers and Packaging, Waste Management



Activities for Internationalization

In 1999, JEMAI called on western European countries, the Republic of Korea, and Canada for participation and formed the Global Environment Product Declarations Network (GEDnet), which is working to broaden the use of type III environmental labels.

The GEDnet website is <http://www.gednet.org>

Efforts are underway to create international standards for these type III environmental declarations.

*An official international standard (ISO 14025) for type III environmental declarations has been issued in around July 01, 2006. JEMAI has been actively involved in this process in many ways including sending representatives to ISO conferences for creating international standards

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