Eco-Certifications:
Considerations for the Institutional and Industrial Markets

Lynne Olson, Ph.D.
Eco-Certification Overview
Institutional & Industrial Perspective

- Eco-Certification Landscape
- Market Drivers
- Limitations
- Ecolab Strategy
- Beyond Eco-Certifications
What is an Eco-Certification?

Many Certifications Support the Market

**Product Level Regulatory Requirement**
- EU Detergent Regulation
- GRAS (Generally Recognized As Safe)
- Food Grade Packaging
- GLP (Good Laboratory Practice)
- REACH (Registration, Evaluation, Authorisation, and restriction of Chemicals)

**Product Level Business Requirement**
- UL
- Energy Star
- NSF/ANSI 60 (Drinking Water Standard)
- NSF
- Palm Oil FREE
- Green Seal
- USDA Certified Organic
- Biopreferrred
- OSPAR (Organisation for the Protection of the Marine Environment of the Oslo and Paris Conventions)

**Facility Level Options**
- ISO 14001
- Responsible Care
- Ecolab

**Internal Operations / Manufacturing**

**External Building / Destination**
Eco-Certification (Product Focused)
Standard: Environmental / Human Health & Safety Attributes

- Voluntary – not required by regulations

- An Eco-Certification is the process by which a product is evaluated by a verifying organization that confirms that it meets the criteria of a standard and can be audited.

- Eco-labels are symbols or logos that indicate a product has met or exceeded specified environmental and safety criteria.

<table>
<thead>
<tr>
<th>Established</th>
<th>Key Region</th>
<th>Certification</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>US</td>
<td>Green Seal</td>
<td>Non Profit</td>
</tr>
<tr>
<td>1992</td>
<td>Korea</td>
<td>Korean Ecolabel</td>
<td>Gov.</td>
</tr>
<tr>
<td>1992</td>
<td>Europe</td>
<td>EU Ecolabel</td>
<td>Gov.</td>
</tr>
<tr>
<td>2007</td>
<td>Scandinavia</td>
<td>Nordic Swan</td>
<td>Gov.</td>
</tr>
</tbody>
</table>
Eco-Certification

Ecolabel Index

- **Ecolabels Index; 435 labels, 197 countries, 25 industry sectors**

- **ISO (International Standards Organization) label types:**
  - **Type I** is a multi-attribute label developed by a third party;
  - **Type II** is a single-attribute label developed by the producer;
  - **Type III** is an eco-label whose awarding is based on a full life-cycle assessment.

**Publications**

*Global Ecolabel Monitor 2010*

Produced in collaboration with the [World Resources Institute](http://www.wri.org), this report provides a snapshot of ecolabel transparency, including the results of a survey of 340 ecolabels from 42 countries, conducted between Q4 2009 and Q1 2010.

Download the [Global Ecolabel Monitor 2010](#) (PDF: 1.6mb).
Eco-Certification

Business Examples

▲ Type I – Multi-attribute

- Partnership – EPA Design for the Environment

▲ Other:

- USDA BioPreferred – One-dimensional
- LEED – Building Certification
Eco-Certification

Business Examples: Type I Certifications

- Product Certification
  - Declaration of Required Attributes
  - Ecolab Products
  - Required by customer for LEED IEQ credits
  - Customer Product Eco-certification

Customer Eco-Certifications
Demand for Eco-Certifications
# Market Factors

## Accelerating Growth of Eco-Certifications

<table>
<thead>
<tr>
<th>Has a Sustainability Leader</th>
<th>Stated Water Goal</th>
<th>Stated Energy Goal</th>
<th>Stated GHG goal</th>
<th>Stated Waste Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Government Bids: Are your products environmentally preferable? (Green Purchasing Guide)

DfE - ASTM, ANSI, Green Seal, EcoLogo, Scientific Certification Systems, MBDC Cradle to Cradle

### Executive Order 13514 - Federal Leadership in Environmental, Energy and Economic Performance (PDF) (15 pp, 88KB)

This Executive Order requires federal agencies to advance sustainable acquisition by acquiring products that are energy-efficient, water-efficient, biobased, environmentally preferable, non-ozone depleting, contain recycled content, or are non-toxic or less-toxic alternatives. President Barack Obama signed Executive Order 13514 on October 5, 2009.

### LEED

**Greening the Restaurants**

**Greening Our Restaurants with LEED® Volume**

McDonald’s USA plans to build 25 additional LEED-certified restaurants by 2015 through its participation in the LEED Volume Program.
Leadership in Energy and Environmental Design (LEED)
Transforming the way built environments are designed, constructed, and operated

Emergence of LEED as a Market Phenomenon
- 2008 tipping point

LEED Volume Program:
- Operational Impact (IEQ)
- Marriott, CBRE, Hines, Starwood, GSA, McDonald’s, Subway...

Customers get LEED points via purchasing practices:
- 1 credit (IEQ 3.3) is directly related to the purchase of Sustainable Cleaning Products
  - Cleaning products must be GS-37, GS-40, or GS41 certified. Starting to accept DfE
- “Easy” credit

LEED Drives Toward Eco-Certifications
Eco-Certification Growth Since 2008
North America

Green Seal Certified Products
1989 Green Seal Founded

EPA DfE
1997 First DfE Product Partnership

DfE= Design for the Environment

Customer Requests, Driving Eco-Certifications
Drivers for Eco-Certified Products

Summary

Market Drivers (recap)
- Corporate Sustainability Initiatives
- Government Mandates (Executive Order)
- Growth of LEED

Sustainability is Complex (Solves Complicated Customer Problem)
- Shift responsibility for evaluating complex human health and environmental requirements to external organization
- Creates documentation for external validation – e.g. LEED, Government Bids

Sustainability Requirements often not Defined by Procurement
- Often not Defined by Point-of-Purchase Decision Maker (e.g. Sustainability Director, LEED Project Leader, Green Board)

Eco-Certifications are easily specified in bids
- Provides a common language
Limitations
Limitations

Real and Measurable EHS Impact?

Eco-Certification Objectives

- Many other certifications are a consolidation of industry best practices that exist
- Eco-Certifications have a goal to change the market and change customer requirements

Unclear if these Standards have a real EHS Impact

- When looking at a whole operation, how impactful is an eco-certified product?
  - Energy use
  - Water use
  - Operational safety
  - Waste

Ecolab Total Impact View
Limitations

Business Concerns

- Eco-Certifications are not Global have Limited Categories
  - Yet our business is global
  - We have broad and comprehensive products and systems

- Narrow “Consumer” Context
  - No view of complete process or system

- Brand Impacts
  - Eco-Certifications specify aspects of product
  - Part of my corporate reputation - third party

- Requirements?
  - Are requirements prioritized?
  - Founded on solid science?
  - Changing Requirements. What’s next?
    Investment with an unknown business risk?
Limitations

Lack of Total System View

1960

- 20 L container
- 1,250 grams

1984

- Solid capsule container
- 125 grams

- 90%

2007

- Apex wrapper
- 7 grams

- 95%
Ecolab Eco-Certifications
Ecolab and Eco-Certifications

Corporate View

—we take a system view, lead with performance

—we don’t develop separate “green” product lines.
  ▪ All products are developed with human health and environmental safety and Total Impact in mind!

—we don’t define our product stewardship ambitions.

Ecolab Total Impact View

Eco-logos and symbols are not used on product labels

To Solve Customer Problems Ecolab has Obtained Many Eco-Certifications
SUSTAINABLE CHEMISTRY

Design Considerations: Hard Surface Cleaner Concentrates

- Cleaning **performance** as good or better than Ecolab and/or industry benchmarks
- Increased use of **renewable** materials
- **Reduce aquatic and acute human toxicity**, and improve **biodegradability**
- Minimize the amount of product chemistry that is **volatile organic compounds**
- **Reduce the amount of packaging** required for a given amount of cleaning capacity
- Achieve the least amount of **personal protection** needed and the most **benign labeling**
- Perform well on cleaning performance, odor, and level of irritation to eyes, airways and skin
PRODUCT PERFORMANCE
Sustainability Chemistry with Enhanced Performance

MORE EFFECTIVE CLEANING THAN THE LEADING COMPETITOR

PERFORMS 17% BETTER THAN COMPETITOR

Recent lab tests show Ecolab Acid Bathroom Cleaner cleans the toughest soils better than the leading competitor.

ECOLAB®

GREEN SEAL CERTIFIED

USDA CERTIFIED BIOBASED PRODUCT

PRODUCT PERFORMANCE
Sustainability Chemistry with Enhanced Performance

MORE EFFECTIVE CLEANING THAN THE LEADING COMPETITOR

PERFORMS 17% BETTER THAN COMPETITOR

Recent lab tests show Ecolab Acid Bathroom Cleaner cleans the toughest soils better than the leading competitor.

ECOLAB®

GREEN SEAL CERTIFIED

USDA CERTIFIED BIOBASED PRODUCT

PRODUCT PERFORMANCE
Sustainability Chemistry with Enhanced Performance

MORE EFFECTIVE CLEANING THAN THE LEADING COMPETITOR

PERFORMS 17% BETTER THAN COMPETITOR

Recent lab tests show Ecolab Acid Bathroom Cleaner cleans the toughest soils better than the leading competitor.

ECOLAB®

GREEN SEAL CERTIFIED

USDA CERTIFIED BIOBASED PRODUCT

PRODUCT PERFORMANCE
Sustainability Chemistry with Enhanced Performance

MORE EFFECTIVE CLEANING THAN THE LEADING COMPETITOR

PERFORMS 17% BETTER THAN COMPETITOR

Recent lab tests show Ecolab Acid Bathroom Cleaner cleans the toughest soils better than the leading competitor.

ECOLAB®

GREEN SEAL CERTIFIED

USDA CERTIFIED BIOBASED PRODUCT
Beyond Eco-Certifications
Ecolab Leadership

Ecolab Principle: Ensure safety throughout the life cycle of each of our products

Customer Problem: Desire documentation

- Comply and communicate health and environmental hazards
- Ecolab Systems are ALL designed to minimize health and environmental impacts
- Ecolab Products
  - Protecting people and vital resources
  - Free our Customers from Risk and Worry
  - It is the right way to do business

Eco-Certification Context

Manage Risk

Enhance Value

Leadership
Beyond Eco-Certifications
2013 Trend – Evolution Sustainable Procurement

Market gap:
Lots of information and Eco-Certifications, but no comprehensive framework for procurement professionals

Sustainable Purchasing Leadership Council (SPLC)

- Ecolab is a Founders Circle Member
- Build framework leveraging existing information where available.
  - i.e. Eco-Certifications where available & adds value / impact
- Guidance and options, like LEED
- Prioritize, baseline, document and measure impact

Document and Measure Operational Impact
Bringing unlimited resourcefulness to the challenge of limited resources.
For more information, visit www.Ecolab.com/csr