

Role of Standards in Making Good Environmental Choices

**GC3 Conference
10 July 2008**

Archie Beaton

Chlorine Free Products Association
for

TerraChoice Environmental Marketing Inc.
www.terrachoice.com

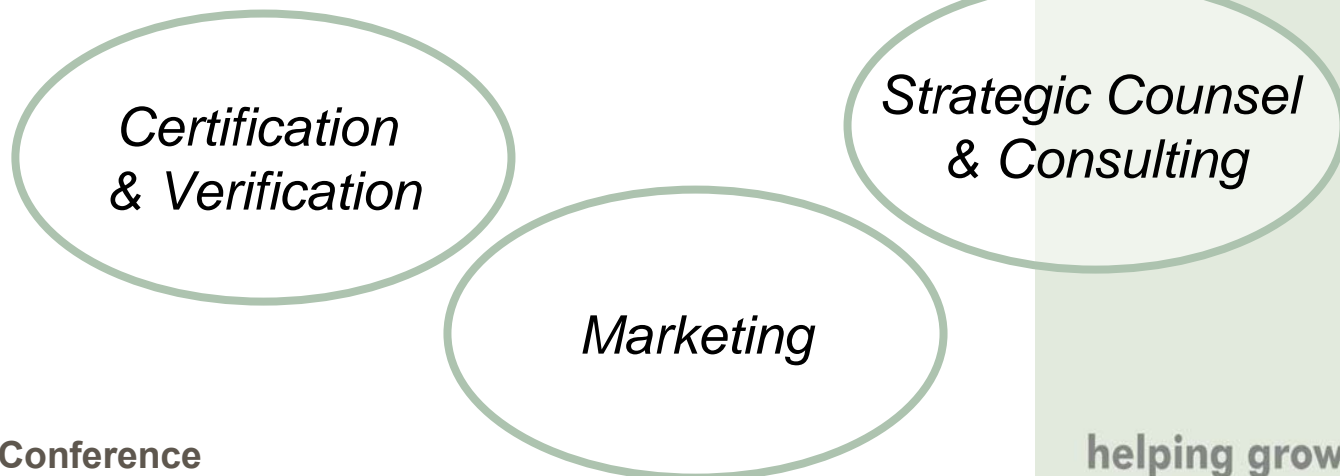
Overview

- Who are we?
- What is EcoLogo^M?
- What are the key environmental issues?
- How to understand environmental claims?

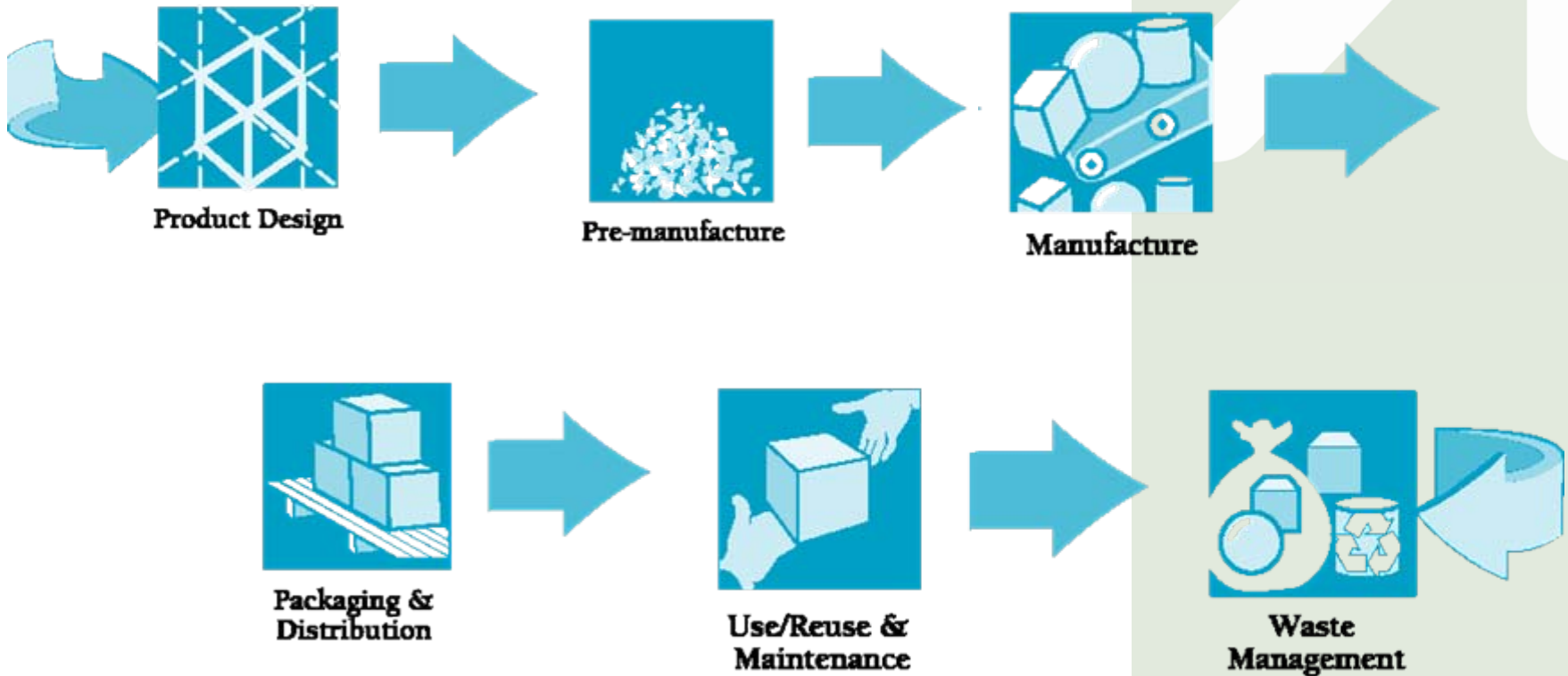


TerraChoice

- North America's leading environmental marketing firm
- Environmental investments = market advantage
- Communicating environmental value
- Programs and services



Lifecycle Perspective



EcoLogo^M Program

- National “Type I” ecolabeling program
- 1988 - Environment Canada
- 1995 - TerraChoice
- Market success / solid platform
 - > 120 categories
 - > 250 companies
 - > 3000 products

GC3 Nike Conference
Beaverton, OR, 10 July 2008



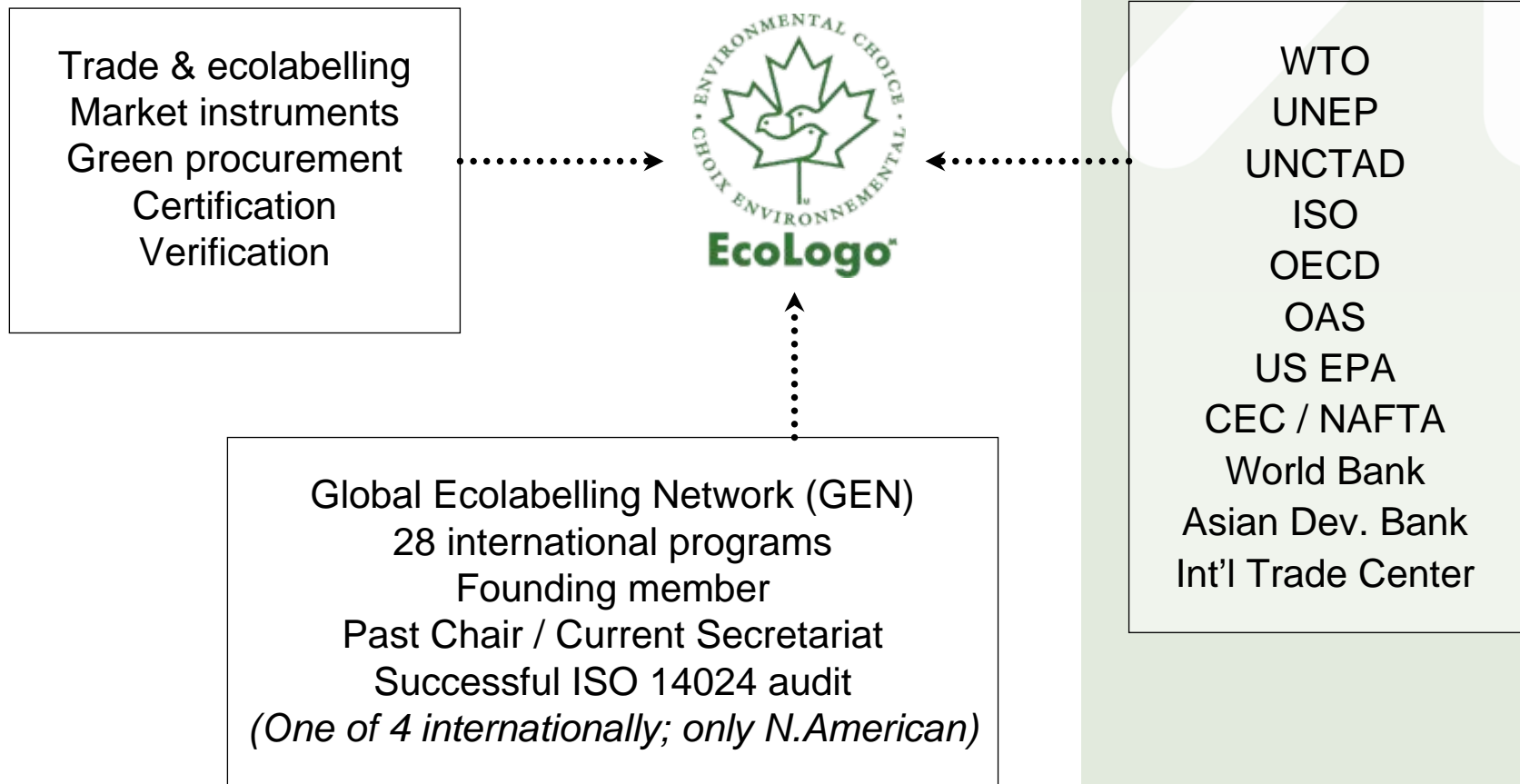
helping grow the world's
most sustainable companies

EcoLogo^M Program

- Sound science
- Life-cycled based techniques
- Multi-attribute
- Multi-stakeholder
- Transparent and accessible
- Independent verification
- Ongoing certification
- Regular criteria review



Internationally Respected



EcoLogo^M Categories

- Automotive Related Products & Services
- Building & Construction Products
- Cleaning & Janitorial Products
- Consumer Products
- Containers, Packaging, Bags & Sacks
- Electricity Products
- Events
- Fuels, Lubricants & Related Products
- Marine Products
- Office Furniture, Equipment & Business Products
- Printing Products & Services
- Pulp & Paper Products
- Services

EcoLogo^M Categories

- Automotive Related Products & Services
- Building & Construction Products
- **Cleaning & Janitorial Products**
- Consumer Products
- Containers, Packaging, Bags & Sacks
- Electricity Products
- Events
- Fuels, Lubricants & Related Products
- Marine Products
- Office Furniture, Equipment & Business Products
- Printing Products & Services
- Pulp & Paper Products
- Services

Hard surface cleaners

- General purpose
- Floors
- Degreasers
- Appliances
- Glass
- Bathrooms

Biologically-based cleaners & additives

Disinfectants & disinfectant cleaners

Industrial cleaners

Carpet & upholstery cleaners

Hand cleaners

Key Environmental Issues

- Efficacy
- Packaging / Labeling
- Physical properties
- Prohibited and restricted components
- Toxicity
- Biodegradability and bioaccumulation



Efficacy

- Products can be green AND still work!
- Usually specific to product application
- Examples:
 - Most: CGSB 2-GP-11 (20.3) ASTM D4488 (A5 or A6)
 - Bathrooms: ASTM D5343
 - Disinfectant cleaners: DIN + CGSB 2-GP-11 or ASTM 4488
 - Biologicals: CGSB 2-GP-11 or ASTM 4488 or respirometry
 - Hand cleaners: cleaning ability, lathering/rinsing, and skin condition after use

Packaging

- Refills in concentrated format or bulk versions
- No propellants or disposable wipes
- Diligence to use non-chlorinated / recycled materials
- Hand cleaners:
 - no bag-in-a-box + recyclable
- Disinfectant cleaners:
 - concentrates with sealed dilution control system (institutional)

Labelling

- Not harmful, irritant, toxic, corrosive
- Appropriate dilution / use / disposal instructions
- Hand cleaners:
 - no claims of disinfecting, anti-bacterial, antiseptic, sanitizing
 - declare fragrances
- Disinfectant cleaners:
 - instructions for pre-cleaning / rinsing
 - list of organisms against which effective, when not effective
- Biologically-based:
 - not effective if with chemical sanitizers (e.g. chlorine bleach)

Physical Properties

- pH
 - varies by category
 - generally $3.0 < \text{pH} < 11.0$
- Flash point: $> 61^{\circ}\text{C}$
- Max temperature usage: $< 17^{\circ}\text{C}$ below flash point
- Skin irritancy: OECD 404 (erythema / edema graded < 2)
- Skin sensitization: OECD 406 (hand cleaners)

Prohibited Components

- **Solvents:**
 - aromatic, chlorinated organic, halogenated, ethylene glycol ethers, butoxyethanol
- **Builders:**
 - EDTA, NTA, phosphorus
- **Surfactants:**
 - APEOs (alkylphenol ethoxylates)
- **General:**
 - Carcinogens (IARC 1, 2a, 2b), endocrine disruptors, heavy metals, zero ODP, fragrances (restrictions for bathrooms, hand cleaners)

Prohibited Components

- Disinfectant cleaners:
 - halogens or halogen salts
 - benzalkonium chloride
 - phenolics
 - peroxyacetic acids
 - toxic metals (arsenic, cadmium, chromium, lead, silver, mercury)

Restricted Components

- VOCs: varies by category
 - hard surface: < 1% (as used) and < 12% (undiluted)
 - hand cleaners: < 1% (institutional) and < 8% (industrial)
 - disinfectants / biologicals: < 1%
- Dyes: food grade, hard surface: < 0.1% (undiluted)
- Biologicals:
 - Surfactants: < 1%
 - Plate count: > 1×10^7 CFUs
 - Strains: biosafety level 1

Toxicity

- Hard surface cleaners:
 - Acute lethal aquatic toxicity on 3 species
 - Whole formulation or individual ingredients
 - $IC_{50} > 500$ mg/l (institutional) or 200 mg/l (industrial)
- Disinfectant cleaners:
 - Acute lethal aquatic tox – photobacterium, $IC_{50} > 100$ mg/l
 - Acute oral tox – > 2000 mg/kg
 - Not provide sub-lethal dose when cleaning
- Hand cleaners:
 - Acute lethal aquatic tox – photobacterium, $IC_{50} > 1000$ mg/l

Biodegradation and Bioaccumulation

- Biodegradation
 - Readily biodegradable by OECD 301A-E
 - Whole formulation and individual ingredients
- Bioaccumulation
 - all organics must not be bioaccumulating



Using Eco-Labels Effectively

Can Someone Tell Me What's Green?

terrachoice

environmental marketing

Green is Suddenly Everywhere

2ND-QTR SIZZLE PROFITS AT 900 COMPANIES (P. 74) | **PAYING FOR COLLEGE BEWARE OF THOSE HIGH 529 FEES** (P. 90) | **TERRORISM WHAT COMPANIES STILL NEED TO DO** (P. 26)

The McGraw-Hill Companies
BusinessWeek
MAY 21, 2007

GLOBAL WARMING
Why Business Is Taking It So Seriously
BY JOHN CAREY (P. 60)



helping grow the world's most sustainable companies

terrachoice

environmental marketing

It's Everywhere...



helping grow the world's most sustainable companies

terrachoice
environmental marketing

It's Everywhere...



helping grow the world's
most sustainable companies

...Even Soap Opera Digest

soap opera
Style Days goes Green for Lumis' wedding

Compiled by Gabrielle Winkler

Sami and Lucas
(Allison Sweeney and Bryan R. Dattilo)
Sami's silk gown is by Monique Lhuillier (moniquehuillier.com). "I've had Bryan's (Dattilo, Lucas) tuxedo for probably 10 years," says the show's costume designer, Richard Bloore.

Stephanie
(Shelley Hennig)
"Stephanie is a lot more sexually aware and body-conscious," Bloore explains, "so she's more free-spirited. She's wearing silk chiffon print dress by Milly."

Chelsea
(Rachel Melvin)
"Chelsea wears a strapless 100 percent silk/satin dress by Rose & Lula. It's in pink to match the wedding flowers."

Maggie
(Suzanne Rogers)
"She's wearing a brocade yellow Carmen Marc Valvo suit. It's got some sequined detailing."

Billie
(Julie Pinson)
"Billie wears a dress by Nicole Miller. It's an iridescent silk organza, which has more body than a chiffon."

Caroline and Shawn
(Peizy McCoy and Frank Parker)
Caroline is wearing a three-piece outfit — tea-length skirt, a cami and a short jacket — by Eileen Fisher.

Kate (Lauren Kostow)
"Her dress is by Mandatay Bay, and the gold jacket is Carmen Marc Valvo."

GL Wedding Belles

Olivia is the "something blue" at her own wedding this week on *Guiding Light* when Buzz confronts her about kissing Jeffrey, but the bride still dazzles, thanks to costume designer Shann Dudley. Olivia wears an Impression by Zure dress that GL purchased at RK Bridal (RKBridal.com). Ava plays maid of honor in a gown from 2.1 Phillip Lim. "Both dresses were modern and simple styles. Crystal loved the dress at first sight," boasts Dudley. See page 6 for more.

These are key things in terms of the environment. We also use Aleon makeup sponges. They are biodegradable and washable, so you can use them more than once. That's a huge factor because we go through so many sponges every day for each station."

For Schwartzkopf Professional products call 800-727-0987. For MOP products, visit www.mop.com, and for Aleon Professional Makeup Sponges, visit www.aleon.com.

28 SOAP OPERA WEEKLY

helping grow the world's most sustainable companies

Most Popular Labels

The environmental standards most frequently cited by purchasing professionals include:



<www.ecologo.org>

- Founded 1988
- 120 standards
- 7,000 certified products



<www.chlorinefreeproducts.org>

- Founded 1994
- 12 standards
- 100 certified paper products



<www.greenseal.org>

- Founded 1989
- 30 standards
- 1,000 certified products

Becoming a Popular Label

Retail environmental standards include:



Note: DfE is process-based not standard-based.

How do we support such a program?

Adding:

- Site Audits
- SMI (Sustainable Manufacturing Initiatives)
- Sustainability Index =
- Environmental Policy +
- Environmental Management +
- Facility Processes +
- Chain of Custody for all raw materials +
- Environmental Risk Management +
- Product Stewardship +
- Public Information +
- Environmental Compliance +
- Employee Recognition



Watch out for Greenwashing

Green-wash (grēn'wōsh', -wôsh') – *verb*: the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service

WARNING:

Learn to ask critical questions or you might be buying or selling products with creative marketing rather than legitimate environmental benefits.



RIDE ON THE FAD Bottle a new version. But what type? Something which gives many Singaporeans a quick fix for fat. Singapore officials are so desperate to cut the city-state's dependency on water from neighboring Malaysia, they authorized the production of something called "Newwater." It's recycled water that is safe to drink even though it once came from sinks and toilets.

Environmental Claims are Growing

- Eco-safe
- Environmentally friendly
- Earth friendly
- Earth smart
- Environmentally safe
- Environmentally preferable
- Essentially non-toxic
- Practically non-toxic
- Made with non-toxic ingredients
- Degradable
- Biodegradable
- Compostable
- Environmentally safe
- CFC-free
- Ozone friendly
- Recyclable

According to the FTC:
FALSE CLAIMS

The Six Sins of Greenwashing™

- **Sin of Fibbing** – Misleading customers about the actual environmental performance of their products.
- **Sin of No Proof** – Also known as the sin of “just trust us,” some manufacturers are unable to provide proof of their environmental claims.



- **Sin of the Hidden Trade-Off** – Focusing on one or two environmental facts, but ignoring other significantly more important environmental concerns.

The Six Sins of Greenwashing™



- **Sin of Irrelevance** – Factually correct, but irrelevant (e.g., “CFC-free”)
- **Sin of Vagueness** – Broad, poorly defined environmental claims (e.g., “100 percent natural”)
- **Sin of Lesser of Two Evils** – The most environmentally preferable product in its class, but still an inappropriate choice (e.g., “organic cigarettes”)



Thank You!

terrachoice
environmental marketing



Archie Beaton

Chlorine Free Products Association
TerraChoice Environmental Marketing Inc.
www.terrachoice.com

terrachoice
environmental marketing

helping grow the world's
most sustainable companies