Navigating the Green Certification Maze

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Green building trends

Green building is already widely adopted globally, with expected strong growth in developing countries.

**Top triggers for green building:**

- **Client demand** (35% in 2012 to 40% in 2015)
- **Environmental regulations** (reduce energy use and cost, conserve natural resources)
- **Social triggers** (sense of community/sustainable megacities, increasing worker productivity and health)
Totino's Pizza Rolls

Nutrition Facts

Serving Size: 6 rolls (85g)
Servings Per Container about 40

<table>
<thead>
<tr>
<th>Nutrition</th>
<th>Amount Per Serving</th>
<th>% Daily Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>220</td>
<td>14%</td>
</tr>
<tr>
<td>Total Fat</td>
<td>9g</td>
<td>14%</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>2g</td>
<td>12%</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>0g</td>
<td>0%</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>5mg</td>
<td>2%</td>
</tr>
<tr>
<td>Sodium</td>
<td>380mg</td>
<td>16%</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>29g</td>
<td>10%</td>
</tr>
<tr>
<td>Sugars</td>
<td>2g</td>
<td>6%</td>
</tr>
<tr>
<td>Protein</td>
<td>5g</td>
<td>10%</td>
</tr>
</tbody>
</table>

Calories from Fat 80

Ingredients: Enriched Flour (wheat flour, niacin, ferrous sulfate, thiamin mononitrate, riboflavin, folic acid), Tomato Puree (water, tomato paste), Water, Imitation Mozzarella Cheese (water, palm oil, rennet casein, modified corn starch, soybean oil, potato starch, cellulose powder, modified wheat starch, whey, soy protein isolate, salt, natural flavor), Yeast, Sugar, Salt, Modified Food Starch, Dried Garlic, Spices, Sodium Phosphate, Sodium Sesquicarbonate, Calcium Propionate (preservative), Potassium Sorbate (preservative), Sodium Acetate, Enzymes, Monoglycerides, Soybean Oil, Maltodextrin, BHA and BHT (preservative), Soy Lecithin, Artificial Coloring, and Titanium Dioxide (artificial color).

Contains wheat, milk and soy ingredients.

Distributed by General Mills Sales, Inc., Minneapolis, MN 55444 USA

*Percent Daily Values are based on a 2,000 calorie diet.
Green Building
Strategic Look at Product’s Sustainability Attributes

- Certified Transparency
- Transparency
- Certified Products – Validation
- Supply Chain Responsibility
- Compliance/Market Expectations
MR Material Transparency credits

Rewards project teams for selecting products that have:

- Inventory of chemical ingredients
- Verified minimal harmful substances
- Life cycle assessment transparency
WELL Building

3 Optimization opportunities for Building Projects:

1. Toxic Material Reduction
2. Enhanced Material Safety
3. Material Transparency
Living Building Challenge
Google’s Portico

Google Healthy Materials Program evaluates:

- Ingredient/chemical inventory and disclosure
- Ingredient/chemical hazard assessment
- Material optimization
- Transparency
- Indoor air quality management

Higher levels of transparency and material health = Higher product score
Kaiser Permanente is a founding sponsor of the Healthier Hospitals Initiative (HHI)• Health Product Declaration, SCS Indoor Advantage™ and Indoor Advantage™ Gold qualify for the HHI Safer Chemicals Challenge• Kaiser works with manufacturers to remove harmful chemicals from products it purchases
   Adoption of LEED v4 criteria & WELL
   Indoor Air Quality
   Energy Management

Government Priorities

- Adoption of LEED v4 criteria & WELL
- Indoor Air Quality
- Energy Management
## Qualify for green building schemes

<table>
<thead>
<tr>
<th>Certification</th>
<th>Description</th>
<th>Green building: LEED v4</th>
<th>Healthy building: WELL/HHI/CDHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>FloorScore®</td>
<td>Indoor Air Quality certification for hard surface flooring, adhesives and underlayment</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Indoor Advantage™/Indoor Advantage™ Gold</td>
<td>Indoor Air Quality certification for furniture and building products that comply with VOC emissions criteria of California 01350 standard and ANSI/BIFMA M7.1</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Environmental Product Declaration (EPD)</td>
<td>Summarizes environmental impacts based on product life cycle assessment</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Health Product Declaration (HPD)</td>
<td>Discloses chemical hazard information for products</td>
<td>-</td>
<td>✓</td>
</tr>
<tr>
<td>Environmentally Preferable Product (EPP)</td>
<td>Life cycle assessment (LCA) based Claim of Product Impacts Compared to Alternative</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Where are you on the spectrum?

**Low-performing player**
(E.g. H&M, Zara)
- Lingering chemicals in clothing like formaldehyde, PFC, NPE and VOCs
- Heavy use of synthetic cotton alternatives made from non-biodegradable chemicals
- Big polluter of waterways
- Dangerous and toxic work conditions

**Leading brand**
(E.g. Patagonia)
- Focuses on reuse and recycling
- Transparent supply chain
- Supports good working conditions
- Inspires customer loyalty with consistent mission
- Clear and relentless commitment to sustainability
Evolution of LEED toward Life Cycle Thinking and Material Transparency

**LEED 2009**
- Rapidly renewable
- Recycled content
- Wood

**Larger scope**
- Raw materials

**LEED v4**
- Sourcing: wood, biomass, concrete, steel, mined and quarried

**Better information**
- Local/regional
- Recycled content

**Products**
- Building product disclosure and optimization: environmental product declarations, material ingredient reporting, raw materials extraction

**More complete**
- Recycling
- Building reuse

**Design and construction**
- Whole-building life cycle assessment
Benefits for LCA and EPDs

Helps architects and designers to understand the likely environmental performance of building materials

✓ Qualify for LEED v4, Green Globes, WELL, BREEAM and more
✓ Direct marketing tool to support supply chains and customers
✓ Support decision making in product development
✓ Identify hot-spots in the value chain

This EPD is one more tool for sharing our environmental performance with our customers...

....Masonite Architectural has had a longstanding commitment to environmental responsibility and continuous improvement.”

-Judy Landwehr, Product Manager, Masonite Architectural
Steps to be your customer’s top choice

Collect data → LCA models → LCA report → Draft, verify, and register EPD
Uptake of Material Health Reporting Tools
HPD Content Inventory
LEED Options 1 and 2:
- “1000 ppm” and/or “100 ppm”
- Applies to product for basic inventory and materials

LEED Option 2:
- 100 ppm and apply to all listed contents
- “Cleaner” chemistry equals higher reward
Relationship between HPD and other tools
Top Recommendations

Know your Product

• Detailed Bill of Material: weights, suppliers, etc
• Energy used to manufacture
• Water used to manufacture
• Recycling efforts

Know your Supply Chain

• Social impact: community, forced labor
• Environmental impact: water, energy, chemical pollution
SCS is a global leader in independent, third-party environmental certification, auditing, testing and standards development.

We help clients show their commitment to sustainability in green building, manufacturing, agriculture, forestry, energy and more.

A wide range of
17,000+ clients
including Starbucks, Biogen and Lonely Planet

30+ years
of experience

23 programs
in multiple industries
What We Do

We help businesses, government and NGOs:

- Meet government regulations
- Stand out in their markets
- Demonstrate environmental and social responsibility

Areas of Expertise:

Green Building  Ecolabels  Life Cycle Assessment
Food & Agriculture  Responsible Forestry  Sustainable Seafood
# SCS Environmental Certification Programs

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<tr>
<td><strong>FloorScore®</strong></td>
<td>Indoor Air Quality Certification for Resilient Flooring</td>
</tr>
<tr>
<td><strong>Indoor Advantage™ / Indoor Advantage™ Gold</strong></td>
<td>Indoor Air Quality Certification for Furniture and Building Products</td>
</tr>
<tr>
<td><strong>Recycled Content</strong></td>
<td>Confirms Recycled Content Percentage of Products</td>
</tr>
<tr>
<td><strong>FSC® Certified Responsible Forestry</strong></td>
<td>Responsible Forest Management Certification</td>
</tr>
<tr>
<td><strong>Environmentally Preferable Product</strong></td>
<td>Life Cycle Assessment (LCA) based Claim of Product Impacts Compared to Alternative</td>
</tr>
<tr>
<td><strong>BIFMA e3 level®</strong></td>
<td>Multiple Attribute Certification for Furniture</td>
</tr>
<tr>
<td><strong>Green Squared</strong></td>
<td>Multiple Attribute Certification for Ceramic and Glass Tiles</td>
</tr>
<tr>
<td><strong>NSF/ANSI 140, 330, &amp; 336</strong></td>
<td>Sustainability Certification for Carpet, Flooring, and Contract Textiles</td>
</tr>
<tr>
<td><strong>CARB Formaldehyde Compliance</strong></td>
<td>Composite Wood Products Meeting CA Air Resources Board Standards for Formaldehyde Emissions</td>
</tr>
<tr>
<td><strong>Health Product Declaration</strong></td>
<td>Disclosure of Chemical Hazard Information for Products</td>
</tr>
<tr>
<td><strong>Environmental Product Declaration</strong></td>
<td>Summary Report of Environmental Impacts based on Product Life Cycle Assessment</td>
</tr>
<tr>
<td><strong>Responsible Source</strong></td>
<td>Social and Environmentally Responsible Sourcing for Textiles and Precious Metals</td>
</tr>
</tbody>
</table>
Thank You!

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