



Understanding Sustainability Certifications

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About Green Seal, Inc.

- **501(c)(3) non-profit**
- **Mission to transform the economy toward sustainability**
 - **Develops science-based standards for products, services**
 - **Certifies products, services that meet these standards**
 - **Over 3,500 certified products & services including cleaning products, hotels, paints, windows, paper, etc.**
- **Meets ANSI, EPA, ISO, GEN, Consumers Union criteria**



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- **Widely recognized by consumer media outlets**



Parenting
Real Simple
Newsweek
O Magazine
Wall Street Journal
Prevention
This Old House...



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Green Seal certification has enhanced these brands, among others:





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Green Claims and Certification

- **First-Party: Self-declaration by manufacturers, suppliers, their representatives or consultants**

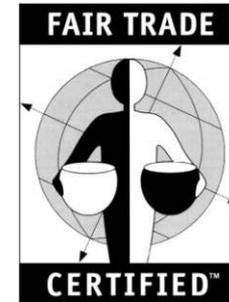


- **Second-Party: Claim verification by purchasers, consumers**
- **Third-Party: Certification by organization not affiliated with either manufacturers, suppliers, purchasers; independent and without conflict of interest.**



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Some Third Party Certifiers





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Why is Certification Important?

- Rise of **greenwashing** and environmental claims: “green” = \$
- Reluctance to **trust** manufacturers’ and suppliers’ claims – they want to sell products
- Single attributes sometimes “**apples to oranges**” (non-toxic vs. low VOC – what about performance?)
- Manufacturers not required to provide full **ingredient disclosure** or data is hard to interpret for consumers
- Distinguish **brand** from competitors
- **Validation** by recognized third-party

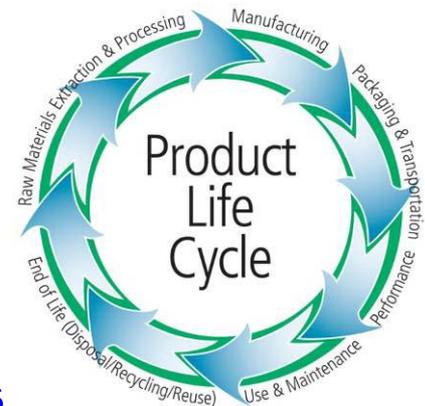


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Effective Third Party Certification

(according to the EPA):

- Organization is independent and with **no conflicts of interest**
- **Open, transparent** standard development process & award criteria
- Criteria based on **life cycle** (cradle-to-grave) approach
- Clear consumer **communication** on nature of certification (complies with FTC Environmental Marketing Guidelines)
- **Regular updating** of standards/criteria
- Facility inspection/**site audit**
- **Protocols for testing** institutions/labs
- Access to certification for companies of **all sizes**





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Other Standards, Guides for 3rd-party Certifiers

- **ISO 14020 and 14024**
 - **Principles of Environmental Labeling**
 - **Principles and Procedures for Type I Ecolabels**
- **ANSI-accredited standards developer**
- **Global Ecolabelling Network (GEN) membership criteria**
- **GEN Internationally Coordinated Ecolabelling System (GENICES, conformance with ISO 14024)**
- **Consumers Union “What makes a good eco-label?”**
- **FTC Environmental Marketing Guidelines**



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CREDIBLE

- Independent, no conflict of interest
- Based on an accessible standard
- Open and transparent standard development process
- Stakeholder input on standard development



RELEVANT

- Standard addresses life cycle considerations, achieves significant impact reductions
- Standard address product performance
- Standard is updated to reflect progress and innovation
- Open access to licensees of all sizes, locations



SUBSTANTIATED

- Clear and transparent requirements for certification
- Continued verification
- On-site auditing
- FTC compliant



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Hierarchy of Third-Party Certifications

- Tier 1. Leadership-level, multi-attribute, life-cycle-based (ISO 14024) standards certified by third party certification programs with on-site audits and periodic monitoring.



- Tier 2. Multi-attribute, life-cycle-based standards where compliance is self-declared.



- Tier 3. Single-attribute or non-life-cycle-based standards certified by a third party, including on-site audits and periodic monitoring.



- Tier 4. Single-attribute or non-life-cycle-based standards where compliance is self-declared.





How Green Seal Sets Environmental Standards

- Register stakeholders (incl. users, manufacturers, trade groups, scientists, government, environmental groups, etc.)
 - Study category
 - Environmental Evaluation
 - Draft standard
 - Public review
 - Response-to-Comments
 - Stakeholder ballot*
 - Publish standard
- * where appropriate



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Sample Stakeholder Group

- **Manufacturers**
- **Seventh Generation**
- **Spartan Chemical**
- **Clean Environment Co.**
- **Church & Dwight**
- **3M**
- **Users**
- **US Postal Service**
- **Aberdeen Proving Ground**
- **Int'l Exec Housekeepers Assn**
- **American Federation of State, County, & Munic. Employees**
- **ServiceMaster Industries**

Government

- **State of New York**
- **City of Santa Monica**
- **MN Ofc Of Env Assist.**
- **MA Exec Ofc of Env Affairs**
- **US EPA**
- **US GSA**

Environmental

- **INFORM**
- **Global Toxics Campaign, WWF**
- **Washington Toxics Coalition**
- **Environmental Health Coalition**

Others

- **UMass Toxics Use Reduction Institute**
- **Individual experts**



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How Green Seal Sets Environmental Standards

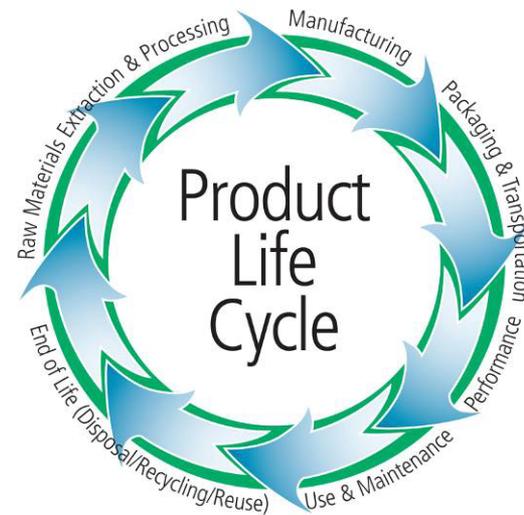
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Green Seal Standards

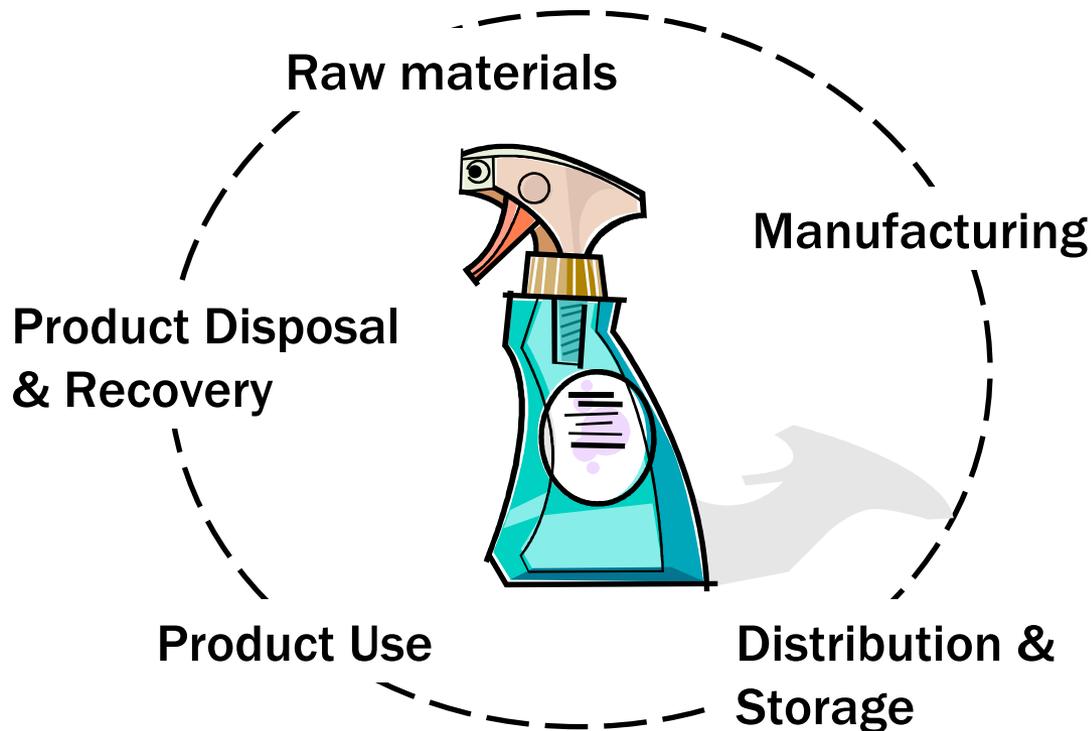
- **Based on best science** – published findings; original life-cycle assessment (LCA) research; precautionary principle
- **Multiple attributes** – energy & climate, water, toxics, indoor air quality, aquatic impacts, solid waste, etc.
- **Life-cycle approach** – mining, manufacturing, transport, use, recycling or disposal
- **Performance requirements** – the product must work well!



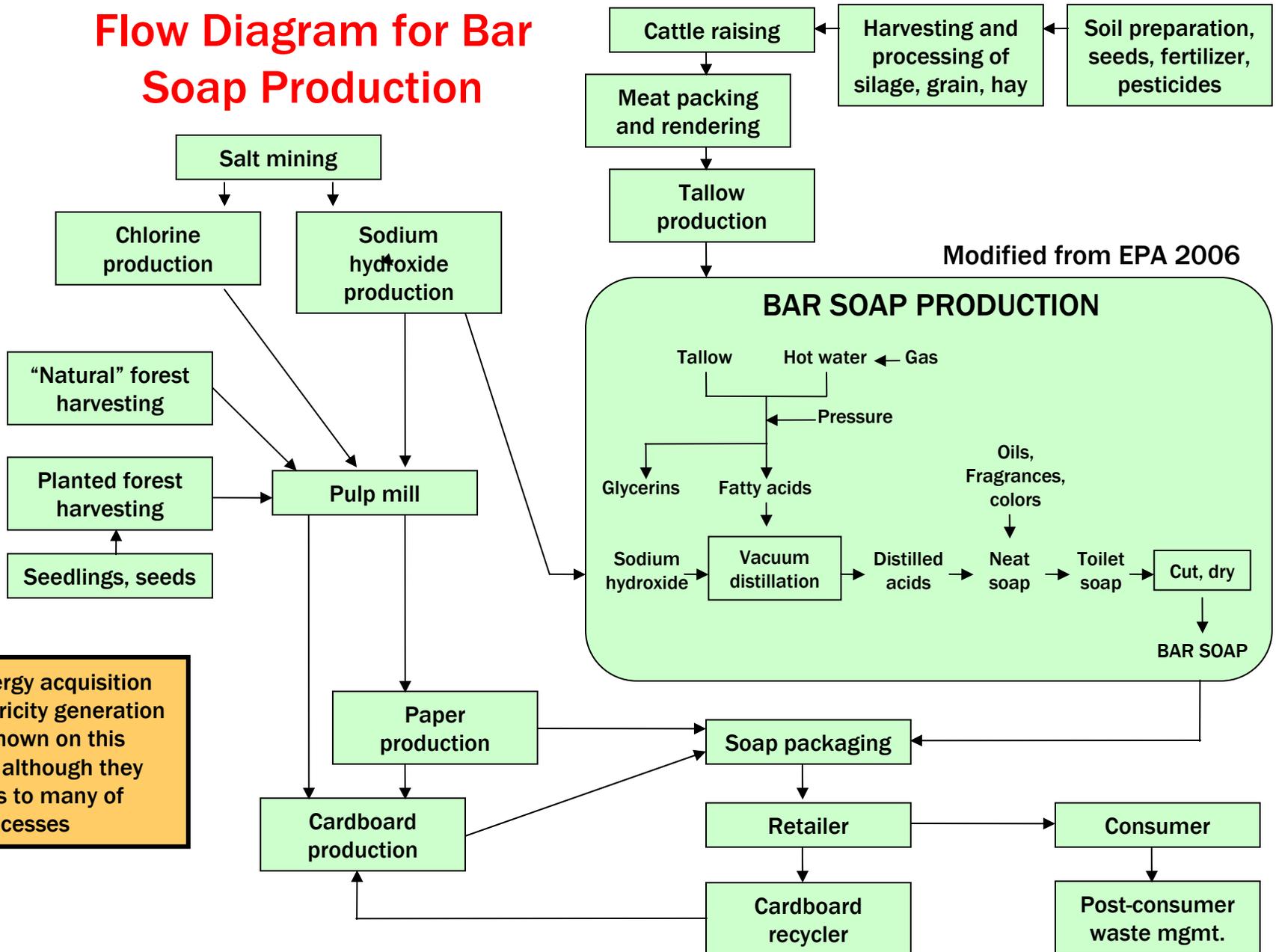


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Product life cycle



Flow Diagram for Bar Soap Production





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GS-37 Revision

- 400 Stakeholders
- Nearly 2 years



**GREEN SEAL™ ENVIRONMENTAL STANDARD FOR
INDUSTRIAL AND INSTITUTIONAL
CLEANERS**

FIFTH EDITION AUGUST 28, 2009

Note: The Fifth Edition contains a change to criterion 4.17 from the Fourth Edition, August 29, 2008

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THE MARK OF ENVIRONMENTAL RESPONSIBILITY



GS-37 Requirements Include:

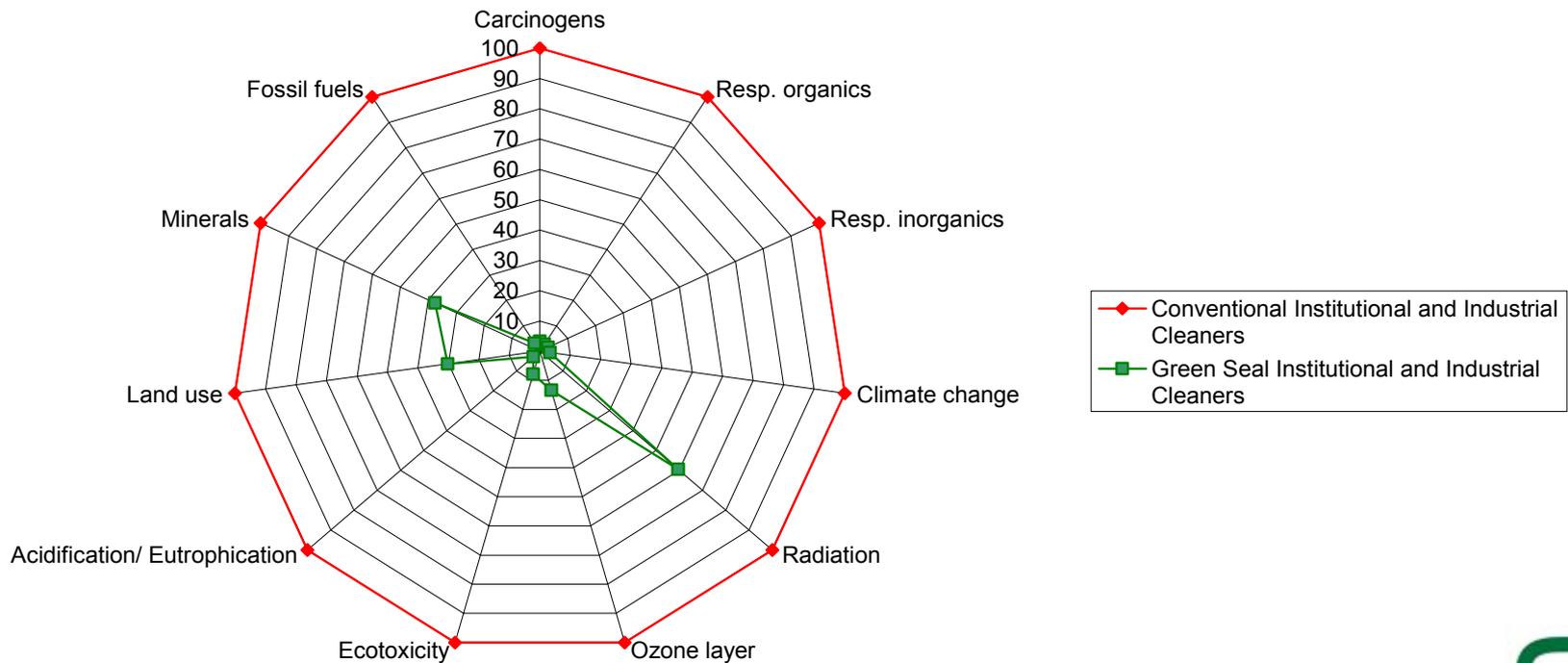
- Performance Tests
- Human Toxicity
- Carcinogens, Mutagens
Reproductive Toxins
- Asthmagens
- Skin & Eye Irritation
- Skin Sensitization
- Combustibility
- Smog Production/IAQ
(VOCs)
- Aquatic toxicity
- Aquatic
biodegradability
- Eutrophication
- Packaging
- Concentrates
- Fragrances
- Prohibited ingredients
- Training
- Animal Testing



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GS-37: Quantifiable Benefits

Environmental impacts reduced at least 88% vs. conventional

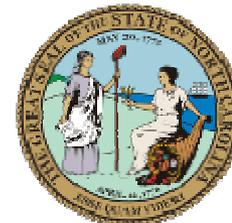




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GS-37: Transforming the Marketplace

- Hundreds of certified products, dozens of manufacturers
- Competitively priced, many cost less than conventional
- Recognized and used by numerous state and local governments, institutions, rating systems.



GREEN GUIDE
for Health Care™ **GGHC**





Case Study - Hennepin County Medical Center in MN

- 7% reduction in the cost of cleaners
- 80% reduction in chemical injuries
- Additional benefits:
 - *Improved indoor air quality*
 - *Reduced toxicity*
 - *Reduced garbage and hazardous waste*
 - *Improved employee and guest experience*



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Green Seal Certification Process

1. Application

- Flat fee, depends on size of company

2. Data Review: product performance, formula, raw materials, packaging information, labels, marketing

3. On-Site Audit

4. Certification

5. Ongoing Monitoring to ensure compliance, continuous improvement

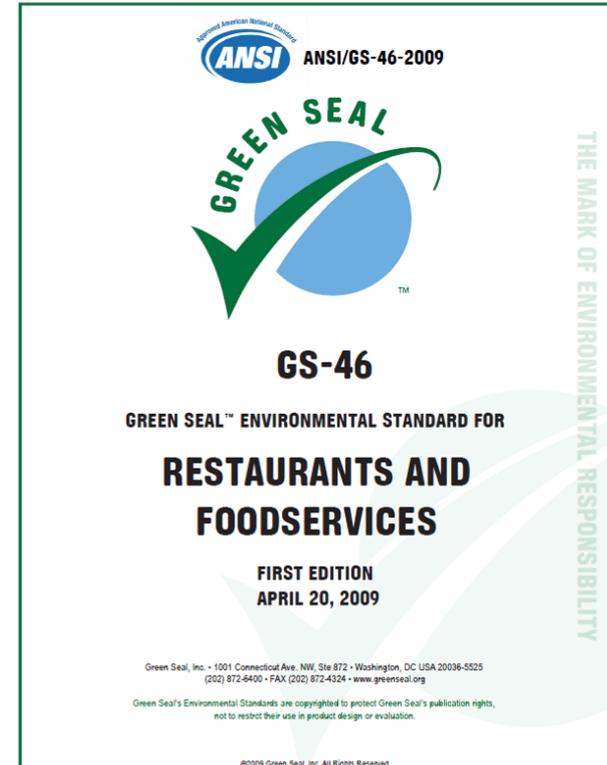




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Other Examples: GS-46 Restaurant and Food-Service Standard

- **First American National Standard for Green Restaurants, Food Services**
- Includes full-service, limited-service, non-commercial, catering operations
- **Based on original life-cycle research;** focuses on food procurement, energy management, and waste
- Organizational commitment required to ensure long-term effectiveness of program
- Three levels: **Bronze, Silver, Gold**





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Environmental Impacts



1



2



3

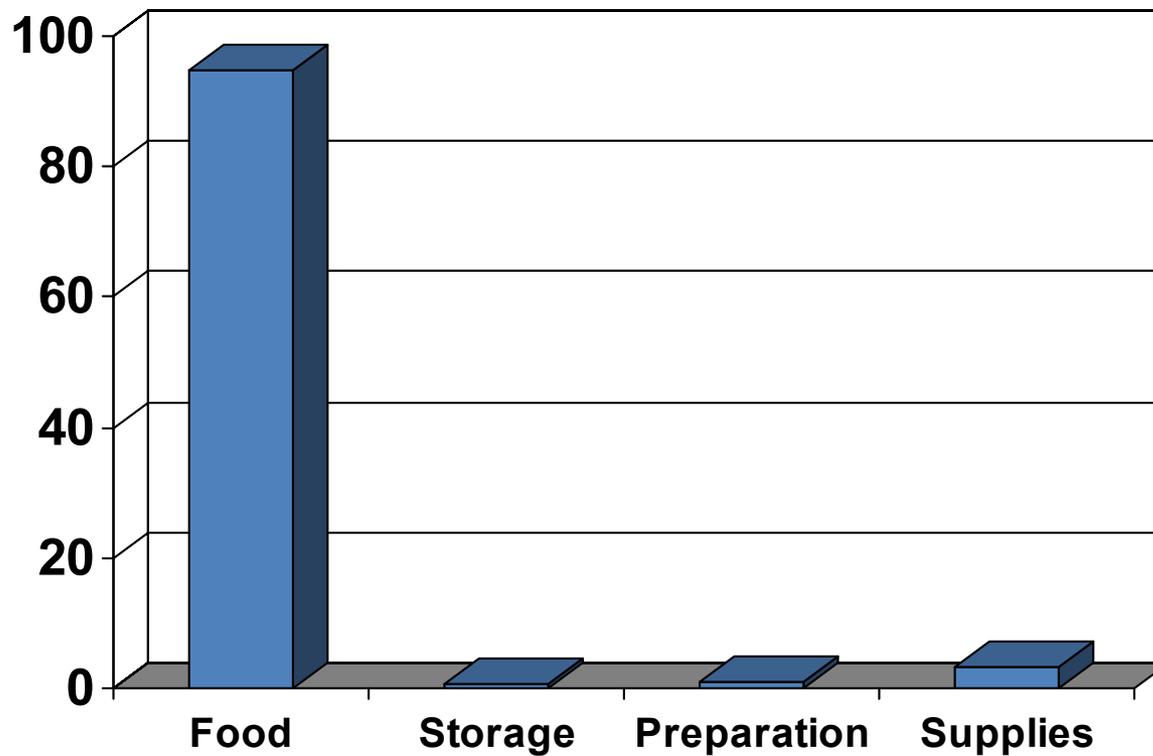


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Environmental Impacts





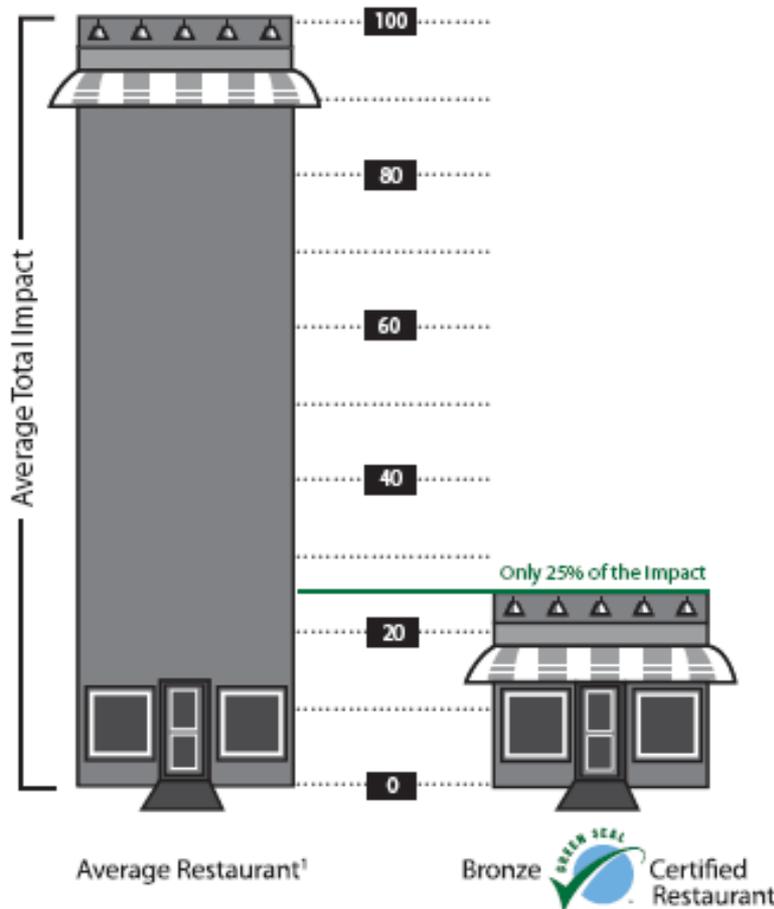
GS-46 Standard Content

- **Sustainable food**
- **Energy management and conservation**
- **Water consumption and management**
- **Air quality**
- **Waste reduction and management**
- **Cleaning and landscape management**
- **Environmentally sensitive purchasing**
- **Company responsibility, operating procedures, training, communication, and education**
- **Continuous improvement**
- **Additional requirements for gold achievement**



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GS-46: LCA Environmental Benefits



The life-cycle study examined eleven different areas of environmental and human health impact, including carcinogens and respiratory issues, global effects such as greenhouse gas and ozone, and environmental issues like land use and ecotoxicity.

The average total impact of a restaurant certified at the entry level (Bronze) is reduced by 75%. Total greenhouse gas reductions average 75%.²



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GS-46: Typical Financial Savings

Source	Solution	Savings	Investment
Wasted Food	Track wasted food, actively reduce what you see wasted	+\$50,000 savings	
Conventionally Grown Food	Buy responsibly grown food - beginning with ¼ of food purchased		-\$50,000 (but could be offset by charging a premium for more expensive items)
Environmentally Intensive Food	Reduce red meat purchases and reduce portions sizes of red meat. Find food options that weren't air transported or grown out of season in a fossil fuel- heated greenhouse.	(Possible savings by buying less red meat overall)	
Energy Use	Track energy use, install energy-saving devices and conserve.	+\$5,000 ⁴	
Water Use	Using less heated water saves energy. Install water-saving devices.	+\$550	
Disposable Products & Solid Waste	Find ways to reduce use of plastic disposable products or find options that are less reliance on fossil fuels (e.g. with recycled content). Track waste and hauling fees.	(Possible savings in hauling fees, reduction in purchases)	
Green Seal Certification	Certification fees for third-party evaluation (average yearly cost for 3 years of certification)		-\$1,840 averaged fees (probable additional income through marketing of certification)
NET	75% reduction in environmental foot print	Savings of AT LEAST \$3,710 per year	

Assumptions:

- Single unit operating for three years
- Annual revenue of \$1-\$2 million
- Monthly purchasing about \$60,000 of food

Findings:

- **Savings of at least \$3,710 per year**



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Environmental Priorities - FOOD

Food must be purchased/produced for the operation; however, there are ways to ensure that the impact is minimized.

- Reduce wasted food. Leverage [Waste Auditing and Continuous Tracking](#).
- Buy environmentally preferable food.





Environmental Priorities - FOOD

Case Study: Health Care Without Harm Study

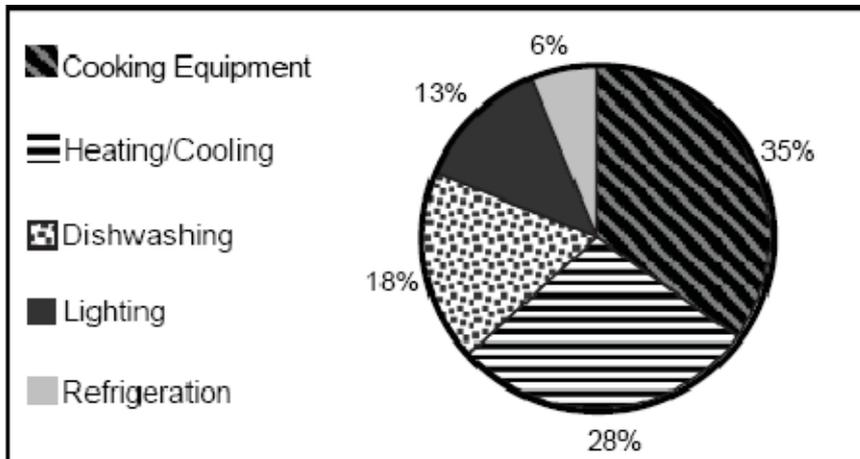
- 200-300 bed hospitals
- Modest reduction of meat (up to 20%), with increases in grains and vegetables
 - Reduced serving sizes of meat being served, increase vegetable and grain portion sizes
- **Savings of at least \$10,000 a year**



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Environmental Priorities - ENERGY

Typical Energy Consumption for Restaurants & Food Service Operations ³



Case Study: Green Seal Study

- Single unit restaurant (about \$2.5 Mill gross)
- Maintenance checklist and conservation plan (on-off)
- Added programmable thermostats and light controls for low occupancy areas
- **\$5,000 savings a year**

NRA (National Restaurant Association). 2009. Energy Efficiency. Last accessed 5-5-09. http://conserve.restaurant.org/issues/ee_detail.cfm



Environmental Priorities - WASTE



Case Study: New York State Department of Correctional Facilities

- Initially, 30% of waste comprised food scraps
- Half of the facilities began composting (on-site and off-site windrows)
- 90% of food waste composted (6,200 tons/year)
- **Reduced hauling saved \$560,000 a year**



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Green Seal's GS-33 Green Lodging Certification

85 Green Seal-certified properties in 20 states:

- 8 in Virginia, 9 in Washington DC
- Also Chicago, Los Angeles, NYC, Portland OR, San Francisco, Houston, Atlanta, Philadelphia, Vancouver WA, and more

In September, Kimpton Hotels committed to Green Seal certification for all of its nearly 50 properties



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Eco-Significance of the Lodging Industry

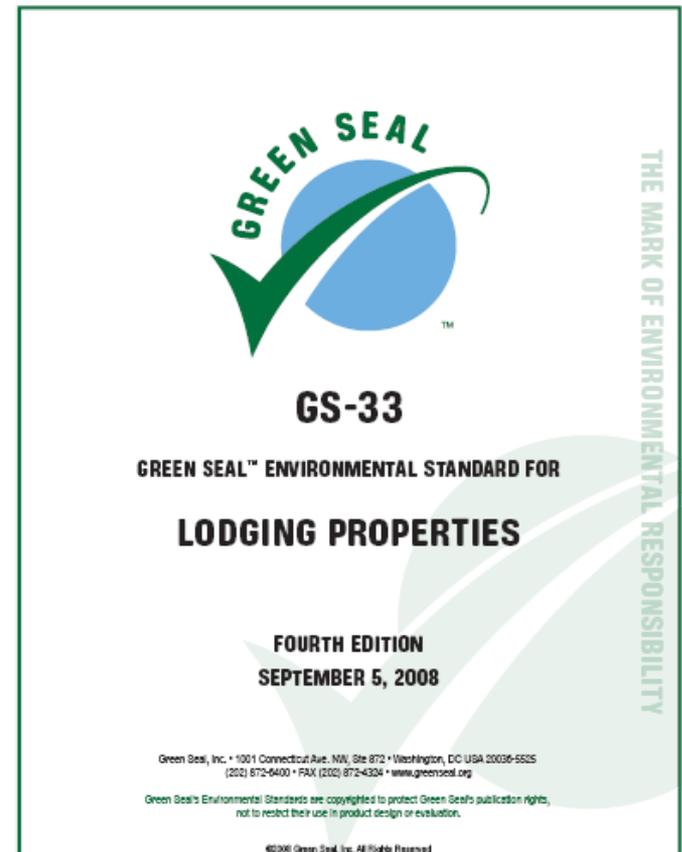
- More than 50,000 properties (15+ rooms)
- Average hotel purchases more products in one week than 100 families will purchase in one year
- Property as microcosm of built environment (purchasing, energy, water, emissions)
- Impacts several major environmental issues – energy/climate, water, waste, toxics, etc.



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Three Achievement Levels

- **Bronze** – entry level that contains essential leadership elements of a lodging operation
- **Silver** -- more comprehensive level of required leadership operations
- **Gold** -- adds additional criteria characterizing properties that are at the forefront of environmental leadership





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Environmental Requirements

- Includes requirements in the following areas:
 - Energy Efficiency, Conservation, & Management
 - Management of Fresh Water Resources
 - Waste Minimization, Reuse, and Recycling
 - Hazardous Substances
 - Waste Water Management
 - Environmentally Sensitive Purchasing



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Reduced Environmental Impacts of a **BRONZE** Certified Property

- **Total GHG savings of 398.26 tons per year** from higher energy and water efficiency and reduced solid waste
 - Equivalent of the annual green house gas emissions of 73 passenger vehicles or the CO₂ emissions from the *energy* use of 35 homes for one year
- **Plus:**
 - 536.12 thousand gallons of water saved per year
 - 109.7 tons of waste diverted from landfill per year

Based on 2009 LCA study for 200-room hotel, 180,000 sq ft, in Chicago, Illinois. GHG in terms of CO₂ equivalence.



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Thank you!

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