



Sustainability: Finding the “New” Green in Your Restaurant Supply Chain

TRSA[®]
REUSABLE TEXTILES & APPAREL

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EXECUTIVE SUMMARY

This white paper explains why and how restaurateurs should adopt green supply chain management practices in addition to their own management and staff efforts to protect the environment and accordingly maximize their operations' sustainability.

Some business techniques are fundamentally eco-friendly, including choosing reusable napkins, towels, and other textile products instead of their disposable equivalents. A recent study¹ comparing the costs and environmental impacts of reusable textiles with disposables provides clear evidence in favor of reusables in this respect.

Beyond eco-friendliness lies sustainability, a broader concept with economic and social consequences. Maximizing sustainability requires working with suppliers who espouse this value. You want to maintain relationships with those who have earned sustainability certifications (issued by third parties) that validate their adherence to stringent green business criteria. Companies that earn this kind of distinction are not just saving the planet. Their efficiencies are providing you with the high value you need from suppliers so your business can thrive.

Some sustainability certifications assess all-around effectiveness in conserving resources, controlling discharges and minimizing environmental impacts. Others evaluate specific products, services, processes or physical plant attributes. The certification matrix accompanying this text lists seven distinctions that a restaurant industry supplier can earn to validate its sustainability in one or more respects.

INTRODUCTION

To continue to serve your customers and make a good profit, it's critical for you and your suppliers to adjust ways you do business to become more eco-friendly and sustainable.

In many countries, including the U.S., tax policies and subsidies favor consumption of cheap, polluting fuels. The excessive levels of carbon dioxide those fuels discharge into

the atmosphere are a major contributor to global warming. According to The Global Commission on the Economy and Climate, the world's governments spend about \$600 billion a year to make fossil fuels cheaper, while putting up only \$100 billion for renewable energy subsidies.^{2,3}

These policies are changing to discourage use of polluting fuels and promote the use of clean, renewable energy alternatives. A carbon tax, for example, makes using carbon-based fossil fuels and the energy derived from them more expensive. This improves the economic attractiveness of solar, wind, and other alternatives.⁴

The B.C. (Canada) provincial government implemented a "revenue-neutral" carbon tax in 2008. In the aggregate, the money collected from it goes to reduce other taxes provincial residents pay.⁵ For an individual business, it creates incentives to decrease carbon consumption and embrace clean, green energy sources and business practices.

Finland, Great Britain, Ireland and Sweden have national carbon taxes; Chile just decided to implement one. Closer to the United States, in addition to B.C. in Canada, the Quebec provincial government has one. So does Boulder, Colo. Best prepared to handle such future costs are businesses that conserve and adopt greener processes today and invest capital to improve their ability to maintain sustainable operations. Clean Green certified textile services, for example, install water- and energy-saving washing, drying and wrinkle-removal equipment that reduces their per-laundry-pound expense, helping them avoid the need to pass higher costs along to customers.

GREENING YOUR RESTAURANT OPERATION

Before focusing on your suppliers' practices, consider the importance of your own eco-friendly strategies as the foundation of your operation's wherewithal. Figure 1 lists some of the most prominent of these you can adopt, implement and maintain as your point of entry to a more sustainable operation.

Some of these are objectives or broad classifications that overlap. For instance, you will reduce your use of fossil

1. TRSA. Comparative Life Cycle Assessment of Reusable vs. Disposable Textiles. Alexandria, VA, August 7, 2014.
2. The Global Commission on the Economy and Climate. *The New Climate Economy*. <http://newclimateeconomy.report/> (accessed 9/21/2014).
3. Quartz Obsessions. "Countries can rescue the planet from meltdown and save money doing it." <http://qz.com/266329/countries-can-rescue-the-planet-from-meltdown-and-save-money-doing-it/> (accessed 9/21/2014).
4. Dowdey S. "How Carbon Tax Works." <http://science.howstuffworks.com/environmental/green-science/carbon-tax.htm>
5. British Columbia Ministry of Finance. "Overview of the revenue-neutral carbon tax." http://www.fin.gov.bc.ca/tbs/tp/climate/carbon_tax.htm (accessed 9/21/2014).

fuels by buying locally grown food products. Similarly, a single tactic can accomplish multiple objectives. Substituting reusable textile products for disposables, for example, improves waste management and, because of manufacturing efficiency and product durability, decreases energy use.

GREENING YOUR RESTAURANT’S SUPPLY CHAIN

Beyond eco-friendliness lies the green field of sustainability, which you nurture and harvest through your supply chain.

“Greening the supply chain” means using a systematic approach to choose suppliers whose products/services are proven to be more sustainable than those of their competitors, and whose own green practices are more sustainable.

Think of green as both eco-friendly and sustainable. Sustainability is the “new” green—a more substantial attribute incorporating eco-friendliness along with other attributes.

WHAT IS SUSTAINABILITY?

A sustainable business is one that meets the needs of the present without compromising its ability to thrive in the future. In its interactions with other businesses, the individual well-being of each enterprise relies upon and contributes to the welfare of the rest of the world. Beyond its narrow environmental aspect of eco-friendliness,

sustainability encompasses a broad array of economic and social factors.⁶

For all forms of human endeavor—including the restaurant industry—sustainability is meaningful as a standard to set and a goal to pursue.

To visualize the concept of sustainability, think of a wheel with spokes. Each spoke must connect to the rim and the hub, supporting the wheel when weight is placed upon it. Weak or missing spokes compromise the wheel’s ability to sustain itself.

Under this definition, a truly green—sustainable—business is like a tree that will bear fruit indefinitely. In the context of your supply chain, your suppliers are sustainable if they demonstrate business practices indicating their long-term ability to yield the “fruit” you need to sustain your restaurant business so you can continue indefinitely to feed your customers.

A SHORT HISTORY OF SUSTAINABILITY

Although *sustainability* is a popular 21st century buzzword, the concept isn’t really new. Foresters began to use sustainable forest-management techniques as early as the 17th century, and sustainable agriculture began to evolve in the 19th century.^{7,8}

A broader perspective on sustainability dates from the 1970s. A landmark event was the 1972 publication of *The Limits to Growth*⁹ by a group of scientists at the Massachusetts

Figure 1: Eco-Friendly Restaurant Business Practices



Managing waste properly



Using less water



Using less electricity or other fuel



Recycling



Purchasing food and other products locally



Donating unused food supplies



Using cleaners that are biodegradable or otherwise safer than alternatives

- U.S. Environmental Protection Agency. “What is Sustainability?” <http://www.epa.gov/sustainability/basicinfo.htm> (accessed 9/21/2014).
- K. Freerk Wiersum. “200 Years of Sustainability in Forestry: Lessons from History.” <https://wiki.umn.edu/pub/ESPM3241W/WebTopicCreator/fulltext.pdf> (accessed 9/21/2014).
- Raffensperger C and Myers N. “A Brief History of Sustainable Agriculture - March 2004.” *The Networker*: Vol 9 No 2. Science & Environmental Health Network. http://www.sehn.org/Volume_9-2.html (accessed 9/21/2014).
- Meadows D and D, Randers J; and Behrens III W. *The Limits to Growth*. New York: Signet New American Library, 1972.

Institute of Technology. They used computer modeling to estimate the effects of unchecked economic expansion and human population growth on natural resources, leading to global “overshoot and collapse.”

In a 1976 book, Robert L. Stivers explored the relationship between nature and economic activity, and described an economy in balance with the natural world.¹⁰

The United Nations took up the topic of sustainability in the 1972 Stockholm Conference on the Human Environment and the 1980 World Conservation Strategy of the International Union for the Conservation of Nature.^{11,12}

In 1983, UN Secretary General Javier Pérez de Cuéllar asked Norway’s prime minister, Gro Harlem Brundtland, to establish an independent organization that would focus specifically on sustainable development. She accepted the challenge and formed the World Commission on Environment and Development (WCED), popularly known as the Brundtland Commission. The WCED began meeting in October 1984 and published its report 900 days later, in April 1987.¹³

The report, *Our Common Future* (New York: Oxford University Press USA, 1987), defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” It heightened awareness of the interlocking aspect of human activities and their effects, and “the vital need for the active participation of all sectors of society in consultation and decisions relating to sustainable development.”¹⁴

The work of the WCED led to convening the 1992 and 2012 Earth Summit gatherings in Rio de Janeiro, and establishing a permanent UN Commission on Sustainable Development.^{15,16} These activities have kept sustainability issues and concerns in the forefront of global political and economic discourse.

SEEKING SUSTAINABLE SUPPLY-CHAIN PARTNERS

How does a supplier demonstrate that it is sustainable and therefore worthy of your business? In an ideal world, your supply-chain partners should be able—and eager—to show you additional things you can do to enhance your restaurant’s eco-friendliness and sustainability.

Each of your suppliers also should be able to show that its products and/or services meet a best-practices definition of sustainability, and that its suppliers all the way back through its own supply chain also follow best practices. That’s quite a challenge, although not impossible. For example, the giant Swiss food-and-beverage products company Nestlé S.A. created an online infographic in 2013 showing how it has reduced its carbon footprint, used resources more efficiently, and achieved zero waste while increasing production.¹⁷

The problem with this approach is the time and effort it would take to verify the sustainability of all products and processes that each of your suppliers uses on your behalf, as well as the buildings, machinery, and other facilities that each supplier operates.

An alternative would be to specify non-sustainable products and service practices that you won’t buy, such as disposable napkins, towels, and other textile products for which reusable alternatives exist. That could work, assuming you have a comprehensive list of practices to avoid, but substantial time and effort would be involved to verify non-sustainability.

A third approach is to treat sustainability certification as a *de facto* demonstration of supplier sustainability. On the assumption that a business seeking such certification turns itself inside out to get third-party verification of its green practices, this approach offers a convenient shorthand. All you need to do is ensure that the certifications you’re

10. Stivers, R.L. *The Sustainable Society: Ethics and Economic Growth*. Philadelphia: Westminster Press, 1976.

11. United Nations Environment Programme, 1972. “Declaration of the United Nations Conference on the Human Environment.” <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503> (accessed 9/21/2014).

12. Schwass R.D. “World Conservation Strategy of the International Union for the Conservation of Nature and Natural Resources (IUCN).” <http://www.eolss.net/Sample-Chapters/C13/E1-45-02-05.pdf> (accessed 9/21/2014).

13. “Brundtland Commission.” Wikipedia. http://en.wikipedia.org/wiki/Brundtland_Commission (accessed 9/21/2014).

14. United Nations. *Our Common Future*, 1987. http://conspect.nl/pdf/Our_Common_Future-Brundtland_Report_1987.pdf (accessed 9/21/2014). Also published in print: *Our Common Future*. New York: Oxford University Press USA, 1987.

15. United Nations Environment Programme, 1972. “Declaration of the United Nations Conference on the Human Environment.” <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503> (accessed 9/21/2014).

16. Schwass R.D. “World Conservation Strategy of the International Union for the Conservation of Nature and Natural Resources (IUCN).” <http://www.eolss.net/Sample-Chapters/C13/E1-45-02-05.pdf> (accessed 9/21/2014).

17. Environmental Sustainability at Nestlé. http://pages.devex.com/rs/devex/images/Nestle_ES_Infographic.pdf?mkt_tok=3RkMMJWWfF9wsRokua3J-d%2B%2FhmjTEU5z16u8oWaOg38431UFwdcjKpMjr1YICtCrn1%2BSDLwEYGJlv6SgFTLjAMati1rgKXRQ%3D (accessed 9/21/2014).

accepting as proof of sustainability actually meet a set of criteria appropriate for a sustainable supply chain.

In the food-and-beverage realm, for instance, you might require a fair-trade certification to avoid products grown with chemical fertilizers and pesticides or a local-sources certification for buying food and beverages from nearby suppliers whenever possible.

These practices may be flags for identifying truly green suppliers because they reflect advanced proficiency. An operation that turns its attention to developing resource-conserving and pollution-conscious aspects of its business probably has mastered other fundamentals that enable it to embrace this new sustainable focus.

Some suppliers set their own criteria for sustainability, claiming they ascribe to higher standards than those of applicable certification programs. Even if they can prove this is the case, they don't benefit from the exercise of going through the actual certification process and, lacking third-party review of their claims, they require you to examine their evidence.

THE CERTIFICATION MATRIX

The accompanying Certification Matrix (Table 2) compares sustainability certifications your suppliers may earn. Most programs are comprehensive, evaluating a variety of products, services, processes or physical plant attributes. Others may focus on just one of these categories. None is a perfect match for another; in its own way, each helps you a supplier's their commitment to sustainability.

Here is a brief description of what each program in the matrix certifies of interest to restaurant operators and how it's done:

- **Clean Green:** laundry practices (www.cleangreen.org). Verifies energy and water use levels and other resource conservation and discharge control practices in providing reusable textiles including uniforms, tablecloths, napkins and towels. Criteria listed in Table 1.
- **GreenCircle Certified, LLC:** product material, carbon footprint, energy use (www.greencirclecertified.com). Certifies products, buildings, and operations. Multi-attribute certification measures variety of green metrics to create nutrition-label-like assessment of product.
- **Green Restaurant Association (GRA):** equipment energy and water efficiency, cleaning chemicals, paper,

food/beverage, linen grease collection, pest control, recycling service (www.dinegreen.com). Endorses these products and services based on manufacturers' and providers' adherence to GRA standards for each. Only Clean Green launderers are endorsed for linen supply. GRA also assesses the full range of distributors' offerings to help them “green” their product selection.

- **Green Seal, Inc.:** paper products, sanitary and food preparation; food packaging; cleaning and degreasing agents; floor care (www.greenseal.org). Assesses environmental impact of product life cycle, from raw materials extraction through manufacturing to use and disposal, in setting standards for performance, health and environmental criteria. Has issued 31 standards covering over 375 product and service categories. Also certifies manufacturers of construction equipment/materials as well as the products they install.
- **LEED:** building design and construction (new projects), interior design and construction (complete interior fit-out) and building operations and maintenance (improvement only) (www.usgbc.org/leed). Acronym for Leadership in Energy & Environmental Design. Scores projects on point scale to achieve different levels of certification based on the degree to which they save resources and positively impact occupants' health while promoting renewable, clean energy. Can apply to office, manufacturing, and distribution buildings of restaurant suppliers.

Table 1: Clean Green Certification Criteria

- Water and energy use limits (per laundry pound)
- Energy efficiency
 - Solar energy
 - Lighting
 - Water heating
 - Discharge water heat recovery
 - Energy auditing
- Water conservation
 - Reuse
 - Recycling
- Solid waste recycling
- Delivery vehicle fuel use
- Wastewater discharge control
- Eco-friendly chemistry
- Preventive maintenance

- Cradle to Cradle Certification:** materials for product designers, apparel/shoes/accessories, building supply/materials, office supplies, interior design/furniture, packaging/paper (www.c2ccertified.com). Assesses a product's impacts on human and ecological health, material reutilization, renewable energy and carbon management, water stewardship and social fairness. Rewards materials that can be disassembled and recycled, or composted as biological nutrients. More than 350 products bear this certification.
- UL 880: Standard for Sustainability for Manufacturing Organizations:** corporate governance for sustainability, environment, work force, customers/suppliers, and community engagement/human rights (<http://ulstandards.ul.com/standard/?id=880>). Evaluates inventory management, policies and procedures, performance, and reporting practices to gauge leadership and innovation and forecast continued attainment of prerequisite and core goals.

Table 2: Certification Matrix: Designations Suppliers Can Earn

Criteria	TRSA Clean Green	Green Circle	Green Restaurant Association	GreenSeal*	LEED†	Cradle to Cradle Certification‡	UL 880
Efficient water use	X		X	X	X	X	X
Efficient energy use	X	X	X	X	X	X	X
Air quality				X	X		
Heat recovery/drained hot water	X		X		X		
Heat recovery/warming water	X		X		X		
Rinse water recapture for reuse	X		X		X		
Use environmentally friendly detergents - low-temp & NPE-free	X		X	X**			
Remove solids/liquids from wastewater	X				X		
Alternative energy, solar or geothermal	X		X	X	X		
Energy audit every 3 years	X						
Skylights or energy-efficient lighting	X		X	X	X		
Recycling programs/waste management	X	X	X	X	X	X	X
Rerouting trucks to save vehicle fuel	X						X
Alternative fuels - hybrid/electric/LNG trucks	X	X	X		X		X
Spill prevention plans	X						
Preventive boiler/water heater maintenance	X		X				
Furnishings and building materials			X		X		
Sustainable food			X				
Environmental education							
Social responsibility/community involvement				X		X	X
Quality Control				X			
Smoking prohibition/control				X	X		
Governance for sustainability							X
Habitat and ecosystem protection							X
Economical management							
Suppliers must have written environmental policy and/or are committed to sustainable development							

* GreenSeal based on Laundry and Restaurant certification lists

** No perc

† Applies to buildings

‡ Applies to materials/ingredients

Not included in the Certification Matrix but worthy of mention are the standards issued by the International Organization for Standardization (www.iso.org).¹⁸ A non-governmental network of the national standards institutes of 164 countries, ISO has published more than 19,500 International Standards covering almost every industry. ISO has a Central Secretariat coordinating the system from headquarters in Geneva, Switzerland. Each national institute has a single vote.

ISO develops standards in response to market requirements. Unlike many certification organizations that use a set of objective standards, ISO’s approach is based on standardization of processes and procedures, for which demonstrating compliance requires extensive documentation. Critics complain that this approach dilutes resources that otherwise could be applied to improve product quality and service delivery.

ISO does not perform certification. To become certified to an ISO standard, a company must turn to an external certification body—ideally one that is accredited and uses the relevant certification standard produced by ISO’s Committee on Conformity Assessment. Accreditation isn’t required but provides an independent confirmation of competence. Table 3 lists ISO standards most likely to apply to your suppliers.

CONCLUSION

Greening your supply chain involves doing business with suppliers who earn your business by providing green products or services, and by virtue of their own and their supply chain’s green practices.

How do you find sustainable suppliers? Specify.

If you issue a request for proposals or a formal bid document, include sustainability language. Consider only prospective suppliers that hold sustainability certifications or are working to meet certification requirements. Also ask specifically about any sustainability issues of particular concern to you and your community.

Even if you’re shopping informally, you can still ask prospective suppliers about their sustainability profile.

You may get some strange reactions, but persevere. As sustainability increasingly becomes a deal-maker in supplier transactions, suppliers increasingly will strive for sustainability to make doing business with them more desirable.

Finally, remember to promote your own commitment to sustainability. Devote space on your menu to describe what you and your suppliers are doing to operate sustainably, or print this information on a separate table card or pamphlet that customers can read while waiting for their food.

The more attention the concept of sustainability receives, and the more people who become sensitized to sustainability issues, the better off the planet—and the economy—will be.

Table 3: ISO Standards Pertinent to Restaurant Operations

ISO 9000 family - quality management
 ISO 14000 family - environmental management
 ISO 22000 family - food safety management
 ISO 50001:2011 – energy management

18. International Organization for Standardization. www.iso.org (accessed 09/21/2014).