

Going Green: How the Green Movement Impacts the Bottom Line in the Hospitality Industry

Richard J. Mills
Denis P. Rudd*

Abstract

The American Hotel and Lodging Association (AH&LA) has released green guidelines for the hospitality industry. Those guidelines include information on effective energy usage, water conservation and waste management. The purpose of this paper is to analyze the literature to determine if the green movement has impacted the hospitality industry's bottom line. Determining whether or not it is practical for older hotels to refurbish and adhere to the guidelines proposed by the AH&LA's recommendations is something that every property must determine on its own. Properties being built now have the option to create sustainable and efficient properties. However, some choose not to due to the perceived cost increases and the fear that there will be little benefit to their own business in the long run. How do we make being green, greener?

Historical Perspective and Advancement of Sustainability

Sustainability is a word that is applied to various elements of a changing environment. The concept of sustainability has received much attention in the public domain and also within the college segment in recent years. From conservation to organic gardening, the consumer is frequently refreshed by an ongoing discussion on the impact of the environment and our everyday needs. This essay will address the history of sustainability; university curriculums and sustainability; restaurants and sustainability; eco-friendly initiatives; and sustainability in our own back yard, Pittsburgh, Pennsylvania.

The roots of sustainability science are directly attributed to Gilbert F. White who passed away in October, 2006 at his Colorado home at the age of 94. He was once viewed as a radical, but now, his work has developed awareness. Unfortunately, this has not been translated into action; in many parts of the world, individuals have hampered the progress that was envisioned by White. Through teaching, writing, public service, and charitable undertakings, White began his mission as early as 1930. At this time, his concerns were not unlike those of today: human control of the natural environment. White's doctoral thesis began the conversation, *Human Adjustment to Floods*; this investigation questioned the warrant of large-scale water diversion as proposed by the government. The Tennessee Valley Authority, the Army Corps of engineers, and the Bureau of Reclamation were observed by thousands of individuals; these accomplishments were questioned by White as short-sighted public bodies, and imposing major constructions. White claimed that adaptability was the key to long term sustainability and encouraged current generations to adapt ourselves to the limits of biophysical systems (Cohen, ejournal.nbil.org). This idea opened the door to further investigation and study, and although it has taken many decades, scholars are beginning to discuss adaptability. Many universities and government agencies now proceed along the parameters of White's vision.

* University Professor, Robert Morris University Moon Township Pennsylvania, United States of America

Sustainability and the subject of food, hospitality, and tourism have become linked through various academic endeavors. Arizona State University (ASU) and its new Tempe-based School of Sustainability is the first of its kind in the world. Their emphasis includes a variety of related coursework in water quality, urban growth, and scarcity problems. ASU is offering interested students a broad spectrum education with its master's degree and Ph. D. programs. The doctorate program will be able to lead others in research and provide adaptive solutions to specific sustainability and its challenges (Blanchet, Feb. 2008). The government website includes the following as a description of what is happening in the field of sustainability:

"Sustainable development marries two important themes: that environmental protection does not preclude economic development and that economic development must be ecologically viable now and in the long run. Common use of the term "sustainability" began with the 1987 publication of the World Commission on Environment and Development report, *Our Common Future*. Also known as the Brundtland Report, this document defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This concept of sustainability encompasses ideas, aspirations and values that continue to inspire public and private organizations to become better stewards of the environment and that promote positive economic growth and social objectives. The principles of sustainability can stimulate technological innovation, advance competitiveness, and improve our quality of life" (www.gov.epa).

Gilbert F. White nurtured many of the principles that precipitate the rise of the contemporary concept of sustainable development (Cohen, 2006). In 1952, he called for industrialized countries to help developing nations formulate conservation strategies to further economic development. White was a Quaker and maintained an untiring interest in voluntary service and domestic and foreign humanitarian assistance; his early work was the forerunner of the Peace Corps. Robert Hinshaw's 2006 biography documents White's life and his many contributions as the earliest expert on sustainability.

There are many reasons for consumers to be concerned with sustainability, and thus, the impact of resources is not only that of food and other consumable goods. Sustainability is important to all areas of the world including tropical landscapes as they still harbor hundreds of globally threatened species that cannot survive anywhere else (Meyers et. al. 2000) Ecosystems in natural environments are important to inhabitants as they are protective and furnish people with sustainable vegetation. For example, impoverished people may be undermined through deforestation, land degradation, and pollution (Alger, 2006) The unintended consequences of rural development policies may leave the remaining landscapes less capable of supporting those who remain (Chomitz, 2006)

The discussion continues as we look to our immediate environment and how we are impacted by conservation and green space. Everyone is familiar with zoning and its impact or lack of impact on our immediate residences, parks, or local common areas. Some communities reject regulation while others have worked to establish internal zoning for community use of resources. While good intentions are evident, enforcement of regulations may be problematic for some communities. Internal zones have become more participatory and transparent, while the legal status of the parks means that property rights over extractive uses within the established zones remains uncertain (Alger, 2006).

To understand how our local regulations may be significant, it is imperative that we look to those out of our immediate scope. Several areas around the world have been impacted by cleared forests within the protected areas; Indonesia inhibits agricultural use because their legal status impedes access to credit. The removal of protected status creates incentives for further speculation in the conversion of public or communal lands. This is used as an example to create a vision of the global significance of sustainability and how all corners of the earth impact other regions in a global sustainable environment. Global policymakers and strategic planners face difficult choices about future energy sources and how they will power cities; business; and transport systems. Sustainable energy and mobility are closely coupled with the supply chain for all economic sectors. Over the last two decades, awareness of sustainability has increased among government, industry, and the general public. Urban and industrial development have been impacted and increased important strategic issues for companies in all industries (Fiksel, 2006).

Universities and Progressive Innovation

The grand state of affairs globally impacts us all and calls us to ask: "What can we do?" and "How does this affect us personally?" The answers are available through study and awareness; the results may be derived from education and a change of perspective at the university level. Arizona State University is joined by many universities to prepare students with information to take to disciplines in a wide range of topics. The following is partial list of courses offered at ASU: International Development and Sustainability; State Land Workshop; Human Dimensions of Sustainability; earth Systems Engineering and Management; Sustainable Resource Allocation; Urban Growth; Water Quality and Society; and Advanced Earth Systems Engineering and Management. This list of courses demonstrates the depth of education and diversity associated with the subject of sustainability. The quality and quantity of courses offered at one university is only the beginning of what is available to students of sustainability, the environment, conservation, and quality of life improvement.

The Acterra Award for Sustainability was created by Stanford University to recognize businesses with holistic sustainability approaches and practices. Stanford University's dining focuses on environmentally sound campus policies. The Stanford University executive director, Rafi Taherian, says that "sustainability is a business strategy. It is good social policy, but done, right, it also reduces costs. If you have to spend additional money to support the program, it isn't truly sustainable." Taherian graduated from the Culinary Institute of America and initiated sustainability efforts when he first joined Stanford in 1996; his focus was on ways to make the kitchen work more efficiently, switching out equipment to reduce energy usage and installing infrared cooking equipment, velocity-controlled hoods and combi ovens. He claims that sustainability begins with conservation and not with food acquisition (www.food-management.com, Oct. 2007).

Taherian's approach has been to focus on top quality food concepts and presentations while maintaining a concept of staying lean and working smart. Various mechanisms are in place including development of an infrastructure on campus. 3,600 students who live in particular residence halls are required to purchase a meal plan; this is approximately 95 % of the students. Taherian relies on able management and engages institutional statesmanship when operating realities to adjust to longstanding traditions without generating protest. "You've got to enlist students as partners in your endeavors," Taherian states. He acknowledges that students are the largest critics. Traditional breakfast service is offered at two dining halls, with continental fare available; on weekends, one closes down while two late-night, meal plan-accessible options offering fresh organic salads

Going Green: How the Green Movement Impacts the Bottom Line in the Hospitality Industry

and fruit, pizza, grab-and-go snacks, smoothies and desserts stay open until 2 AM. The sustainability sidebar became a student celebration; Taherian organized them to plant and maintain organic, community herb and vegetable gardens at each residence hall. Dining services now use many of the fresh herbs in its own culinary efforts, and students, under supervision, sell other bounty at an on-campus, outdoor Produce Stand every Friday (Freidland and Lawn, 2007).

Hofstra University is providing a fine-dining venue as they had a grand opening held inside the ballroom; they featured Tuscan pizza topped with gorgonzola, poached pears and prosciutto, Mediterranean kebabs, and ice cream, in lemon-poppy, sundried cherry and goat cheese-chocolate-chipotle flavors. Authenticity is the key word in this menu selection and is reflected at the University of Rochester in the campus dining services' approach to sustainability initiatives. "We're introducing procedures such as local purchasing and evaluating our carbon footprint in a sensible way that meets many criteria including cost quality including cost and quality. We're very sensitive about designing a composting program, for example, and don't want to be guilty of greenwashing which Cam Schauf defines as just doing things that look green but aren't" (www.nrn.com february 25, 2008).

For the past two years, Cornell University Dining has made sustainability a focus for the Ithaca community. The Moosewood Restaurant has serviced customers in the local community with an emphasis on fresh food with a healthy and 100% sustainable restaurant experience. The Moosewood's most popular sandwiches and salads received positive feedback from customers; the sandwiches are made from locally grown products. The venue has been utilizing biodegradable materials including biodegradable utensils (FSD mag.com).

Current Trends in the Industry Prove Restaurants Profit from Sustainable Practices

Students and universities have joined the cultural conversation with many commercial enterprises. One area of great concern is the hotel industry as guests demand a green environment with greater responsibility from hotels and restaurants.

As restaurants and institutions continue the evolving process toward sustainability, this year's International Hotel/Motel & Restaurant Show hosted 35,000 hospitality professionals; the debut of the Green Restaurant Association Pavilion will help visitors adapt to new eco-friendly concepts (restaurants & Institutions, Oct. 15, 2007). Considering that this is hotel industry's annual version of the one-stop shop, the 92nd annual IH/M&RS at the Jacob K. Javits Convention Center managed to provide a glimpse of the major themes and trends in environmental sustainability and technology.

Boutique lodging was the focus in which a panel comprised of young designers weighed in on topics such as branding and technology and discussed how they are designing for the next generation of boutique guests. The panel focused on a blend of the five senses or natural elements: earth, water, air, fire and space. "Senses are very powerful because that is what creates a lasting memory" (Hotel Business, Dec. 2007).

Design is only a part of the total package for the hotel industry; in addition, the guestroom category is of the utmost importance. Wilson Associates was awarded for the design of the Kempinski Hotel in Dubai, United Arab Emirates; Skidmore, Owings & Merrill LLP won in the suite category for the Peaks Resort & Spa in Telluride, Co. Wilson Associates also won in the spa category for the Four Seasons Hotel Hong Kong. In keeping with the

environmental focus, five green product awards were awarded; in addition, there were awards for technology.

Statistics show Hotels, Motels, and Restaurants that sustainability is of interest to half of U. S. consumers. Information Resources Inc. claims that at least one of four key features, eco-friendly packaging, organic status, eco-friendly status or fair-treatment status, is a consideration of 50% of consumers (Restaurants & Institutions, Feb. 2008). Fresh food and in particular fresh fish is a concern for many chefs as popular fish become scarce; alternative species are now part of culinary trend. "I've just contracted a group of fishermen to get barracuda for me out of the waters of Tobago," says Barton Seaver the chef of Hook in Washington, D. C." (www.nrn.com, November 5, 2007). According to Bret Thorn, chefs are in a quandary about fish because for years people ate what was considered to be an endless supply of cod. Now consumers have to be confident in making alternative decisions. Alison Barshak, the chef-owner of Alison at Blue Bell in Blue Bell, PA., has a similar philosophy: "We just call our fish person and ask what's local." John Besh, executive chef of Restaurant August in New Orleans, recalls shrimping in the South and also, the variety they caught: flounder, sheephead, tripletail. Besh cooks tripletail in a Cajun-style court bouillon with onion, bell peppers, celery, tomato, allspice and other seasonings. He is now serving brown eel, which he cuts into pieces, poaches, fillets and then makes into a brandade to be stuffed in ravioli. Alternative seafood species are definitely being selected by many chefs in a variety of cities.

Sam King, CEO of King's Seafood Company, a restaurant and distribution operation, is trying to change the notion that sustainable food is more expensive. The view that sustainability is an environmental issue is of the utmost importance to the California chain of eleven casual King's Fish Houses. King helped launch the Sustainable Seafood Forum that advises restaurateurs and the public about seafood choices that are sustainable and affordable. King's doesn't sell grouper, orange roughy, Pacific cod, Chilean sea bass, or other endangered species, but includes farmed and wild salmon, farm-raised trout, shad, whitefish and mussels. "If the only salmon I served was from certified wild fisheries, half of my customers couldn't afford it. We source from farms in Chile that use advanced aquacultural techniques" (Foodservice Buyer, September 2007).

Technology company executives discussed major industry trends at the 12th International Foodservice Technology Exposition and acknowledged sustainability and environmental concerns as key to the decision-making process among suppliers in the decade ahead. "When it comes to sustainability, all of us here...are concerned about our impact on the environment," said Steve Garland, the national sales manager for Epson System Device Group (www.nrn.com Oct. 29, 2007). The question: "How do we run profitable businesses and still be food stewards to the environment?" These questions and others of great concern to many green areas and environmentally safe endeavors. One answer is that of on-site industry sustainability; this is evidenced at Stanford University and other resource based venues. As we approach a new way of thinking about resources, the local supermarket comes into view and how local produce, milk, and other foods can be utilized to furnish product to the hospitality industry including hotels and restaurants. The size of the supermarket chains and their procurement power makes them more obvious targets in the environmental debate than restaurants (Caterer & Hotelkeeper, 2007). Another challenge is that of how much carbon gas your products generate. In addition, the questions posed for restaurants are whether or not units even open for business if a metropolitan area needs to ration clean water. Balancing energy spent, water consumed, coupled with calories, sodium and saturated fats for each menu item can be taxing. All of

arenas must be entered to answer the final question of sustainability and cost effectiveness.

Sustainability from Grass Roots

The Pittsburgh market, like many others around the globe, are exploring new and innovative ideas and implementing them for consumers. The Green Harvest sustainable food system project was developed by the Greater Pittsburgh Community Food Bank in 1991; this was developed to help low income people while facilitating agricultural sustainability, economic development, and urban beautification in communities it serves. The project combines environmental concerns; community economic development, and direct service to low-income people in the following ways:

- As a sustainable agriculture program and environmental enterprise that has resulted in new jobs (especially in low-income urban communities);
- By promoting accessible, well-planned garden space and retaining the community focus in urban/public housing areas; and
- By providing a multitude of opportunities for citizen and youth involvement in sustainable agriculture and environmental issues (Sustainability in Action).

The money to support the program comes from CSA shareholder fees, sales to Farm Stands, seed and produce sales, and foundation support that includes funding from an anonymous local foundation, the Center for Rural Pennsylvania, and Share Our Strength. Community Development Block Grant funding helped secure needed equipment for the farm.

Harvest Sensations offers fresh produce, fresh seafood, fresh chicken and fresh dairy and are dedicated to servicing customers with the highest quality fresh products available to all food service outlets. This Pittsburgh based company is part of Paragon/Monteverde and has a commitment to customers to guarantee every order with the freshest and best products available. For 26 years, Harvest Sensations has built a strong foundation with specialty food experience from the garden to the kitchens of many fine restaurants. President, Dean Simon shares his passion for quality food with you through Harvest Sensations. "Along with our team of only the finest farmers, we proudly offer you delicious seasonal produce sourced weekly" (www.harvestsensations.com).

Richard DeShantz is a well known chef in the Pittsburgh area and approaches his food procurement with zest and vigor as he arrives at The Strip District every morning. Chef DeShantz shops smart because he picks up what's fresh; he's also not afraid to ask for suggestions or about how certain things are prepared or served. He is a learning chef as he delivers his expertise. He has certain rules to follow when purchasing his food items:

- Rule One: Don't be afraid to ask questions.
- Rule Two: Carve out time to shop.
- Rule three: Buy what's in season.
- Rule four: don't overlook your "home" grocery store.

DeShantz chooses spices, oils, and butters according to the dishes he is serving. He prefers to cook with peanut oil due to its high smoking point and neutral flavor. He also uses it to cut the intense flavor of sesame oil. The Strip District is the perfect haven for professional and amateur chefs in Pittsburgh, and offers a fresh alternative to other choices in a local market (The Table, Autumn 2007).

Blackberry Meadows, in Natrona Heights (near Pittsburgh, PA), is being acquired by Slippery Rock graduates who believe sustainability can sustain them. Greg Boulos, 31, Jen Montgomery, 29, Heath Gamache, 35, and Greg's brother Dave, 30, are taking the chance of their young lives as they acquire Blackberry Farms. Jack and Dale Duff have been operating the farm all summer under a lease/purchase agreement. The farm's Community Supported Agriculture program (CSA), a veggies-by-subscription program, is the oldest organic one in Western Pennsylvania. The agreement hinged on Blackberry's 100 plus customers continuing to receive their weekly boxes of fresh produce. "The place was untended, strangling in brambles. We named it Blackberry Meadows and set to clearing it. Just the two of us with a small tractor" (Pittsburgh quarterly, fall 2007). The four partners graduated from Slippery Rock's unusual and entrepreneurial Masters of Science in Sustainable Systems. Each brings a unique component to the farm and the object is sustainability. One partner, Jen, has farmed on three continents; she can discuss permaculture in New Zealand and can also, build a stone wall, cook on a wood stove and herd sheep. She managed a CSA in Harper's Ferry, and at Slippery Rock directed the school's farm and farm market. She credits "organic bloods" in Pittsburgh: Don Kretschmann, operator of one of the largest organic CSA's in the country; and Mindy Schwartz of Garden Dreams. Mindy farms Wilkesburg vacant lots and is a partner in the big-thinking foundation, Grow Pittsburgh, that spearheads many urban agriculture projects.

On an extremely local scale, we are neighboring a newly developed farm: Shared Acres. Dwayne and Renee Bauknight of Cork Bocktown Road in Clinton, PA, spoke about their newest venture. They are farming nearly 40 acres of newly purchased land they have named Shared Acres. Dwayne does most of the farming, holding a Bachelor's Degree from Robert Morris University, a master's in Engineering Management from Robert Morris University, and is pursuing his Ph.D. at West Virginia University. When speaking with Dwayne, you cannot miss the depth of knowledge and enthusiasm he has for sustainable gardening. "We will focus on growing biodynamically, with no industrial pesticides or chemicals; we let nature do its thing." Dwayne answered my question about deer and he claims that he grows enough for both humans and wildlife and has had no problems. His farm is a co-op where shareholders will come by the farm and pick up a basket of vegetables that will eventually incorporate fruits, herbs, and flowers. Each basket will include a regular mix of salad greens and seasonal vegetables.

In 2002, Evan and Jodi Verbanic started a garden on a small plot of land at their home in Crafton, PA. They also grow vegetables, herbs, and flowers, and launched a small-scale organic Community Supported Agriculture (CSA) project that they named Urban Roots. By 2005, they purchased 35 acres named Cherry Valley near Burgettstown, PA. Cherry Valley has impacted the retail and food service scene as well as the corporate partnership with Parkhurst Dining Services, a division of the Eat n' Park Hospitality Group. They delivered weekly farm shares to Bayer Corporation and Dick's Sporting Goods for their employees. Cherry Valley has impacted the retail and food service scene as well. In addition, they plan on participating in farmers' markets in: Bethel Park, Sewickley, and Washington. "We're pleased to provide what the public wants, and what they want more of is what's organic, fresh, nutritious, and high quality" (Jeannette, 2007).

Conclusion: Sustainability begins at home

Roselea Farm was built in 1905 and was utilized primarily as a residence for one hundred years; some of those years the farm housed dairy cows, and at other times, the acreage was used for growing vegetables and grain. In 2003, a greenhouse was added to the property to grow flowers as a commercial crop; in addition, fencing was updated to contain

a herd of meat goats. The greenhouse is operated by a local grower who has expanded from growing annual flowers to perennial flowers, herbs, and vegetables. The goats are taken to a local meat market for members of the community to purchase. This form of sustainability has taken hold as Roselea Farm Greenhouse has expanded its resources and made product available to local residents.

The grower, Greg Wilson, has developed a mixed green salad mixture that is sold to a nearby restaurants. The Hyeholde Restaurant is an upscale restaurant, and like many other specialty eateries, the chef finds locally grown produce to be very attractive to customers. The mixed greens or micro greens are grown approximately 10 months of the year while other vegetables, such as peppers, are grown for 6 months. Another local restaurant, The Sea Shell, buys peppers for stuffing and also, is interested in the procurement of greens. The vegetable business is growing as the need for sustainable products increases and demand leads the way; sustainability does begin at home, and Roselea Farm is our home of sustainability.

Bibliography

1. Alger, Keith. (2006). "Human response to environmental decline at the forest frontier." <http://ejournal.nbil.org>. Fall 2006. Volume 2. Issue 2.
2. Blanchet, Kevin D.(2008). *Sustainability*. Vol 1 No. 1 February 2008.
3. Campbell, Charlene. *Table Magazine*. Autumn, 2007.
4. Chomitz, K. (2006). *At Loggerheads? Agricultural Expansion, Property Reduction And Environment in the Tropical Forests*. Washington DC: World Bank.
5. Cohen, Maurie, J. "The roots of sustainability science: a tribute to Gilbert F. White." *Sustainability: Science, Practice, & Policy*.<http://ejournal.nbil.org>. Fall 2006. Volume2. Issue 2.
6. Core, Patricia. (2007). *Food Service Buyer*. "Fishing for Answers." Sept. 2007.
7. Fiksel, Joseph. (2006). "Sustainability and resilience: toward a systems approach." <http://ejournal.nbil.org>.
8. Friedland, Ann and Lawn, John. (2007). *Food-Management*. October 2007). *Food Service Magazine*. (2007). March 15, 2007. *Foodservice Magazine*. February 15, 2008.
9. Hinshaw, R. (2006). *Living With Nature's Extremes: The Life of Gilbert Fowler White*. Boulder: Johnson Books. *Hotel Business*. December 7, 2007.
10. Jeannette, Pat. (2007). *Allegheny West Magazine*.
11. Meyers, N., Mittermeier, R., Mittermeier, C. da Fonscca, G., & Kent, J. (2000). Biodiversity hotspots for conservation priorities. *Nature* 403(6772):853-58. *Nations's Restaurant News* (November 27, 2006).
12. Phillips, Virginia. (2007). *Pittsburgh Quarterly*, Fall 2007. *Restaurants & Institutions*. January 2006. *Restaurants & Institutions*. February 2006. *Restaurants & Institutions*. October 15, 2007.
13. Thorn, Bret. (2007). *Culinary Currents*. "A Good Catch." November 5, 2007. www.nrm.com. February 25, 2008.
14. www.harvestsensations.com/menuV1.html
15. www.pmfoods.com