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Emerging Eco-Eateries:
A Comparative Study of Environmental Decision Making in the Restaurant Industry

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Research Abstract

The average American today spends roughly half the money he/she spends on food each year at restaurants, a percentage which has doubled in the last quarter of a century. At the same time as restaurant patronage has risen dramatically, concerns over the environmental impacts of American food systems have become a hot topic in the public forum. With growing alarm over global climate change and an unsustainable rate of natural resource exploitation, journalists, politicians, and citizens groups are taking a critical look at the effects of food production and distribution. Restaurants represent a particularly intensive use of resources including energy, water, and paper in addition to problems with pollution. On average restaurants use five times more energy than any other commercial space. Yet when it comes to taking action to reform these practices, the food service industry repeatedly underperforms. It is therefore crucial to understand how restaurants are addressing environmental issues. Large corporate restaurants and small locally-owned businesses demonstrate differing approaches to improving environmental performance, raising the question as to which is more efficient in achieving environmental goals.

To compare these two styles of environmental management, Emily Reisman conducted a study which draws on theoretical material from economics, ethics, and business theory to investigate environmental decision making in the restaurant industry. She conducted personal interviews with restaurant owners and managers as well as gleaned information from company literature in order to collect comparative data on corporate restaurants and locally-owned eateries located within the St Louis Delmar Loop District. She finds that restaurants both large and small maintain advantages and disadvantages in addressing environmental concerns. These attributes result from differing roles of publicity, strategic versus opportunistic environmental action, and unique methods of innovation. Moreover, understanding these distinct decision making processes provides valuable insight into furthering environmentally-minded actions for the future.

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INTRODUCTION

Eating is one of life's most basic tasks. Simple. Satisfying. A universal necessity, food forms the foundation of cultural practices worldwide. When we eat, what we eat, and how we eat are essential elements of our way of life. And in the United States, *where* we eat also takes on profound importance. Restaurants are a staple of the landscape. From mega-franchises like McDonalds through the growing fast-casual chains such as Noodles and Company to the neighborhood bistro, Americans spend roughly half their food budget eating out (Nielsen 2004). While in 1965, restaurant patronage made up only 25% of the household food budget, restaurant patronage is rising dramatically¹. The restaurant industry in 2008 reaped more than \$558 billion in sales (National Restaurant Association 2008), and continues to grow. Restaurants continue to function as an essential element of our culture and our economy.

Among retail industries, restaurants also represent an incredibly concentrated use of natural resources. Water for dish washing, gas for cooking and heating, electricity for running high-powered kitchen equipment, and of course the food itself draw immense amounts of materials from the natural environment². And as any restaurant employee will tell you, the amount of waste can be enormous. Food waste, kitchen grease, glass bottles, and disposable packaging send heaps of garbage to landfills. Each restaurant produces an average of 50,000 pounds of waste per year (Nielsen 2004). Shockingly little attention

¹ This data reflects trends through the end of 2008 and may not prove accurate considering the recent economic downturn. At the time of this writing there was no reliable data revealing how the struggling economy has affected restaurant patronage.

² This might be countered by the notion that the concentration of energy and resource use in restaurants may in fact be more efficient than a vast number of individuals using individual appliances in their own homes. However, a great deal of a restaurant's environmental impact is a result of energy used for heating and cooling the space (which is presumably also running in peoples' homes even when they go out to eat), disposable materials (much less likely to be utilized at home), and excess food (the portions of which would presumably be better controlled in home cooking). Therefore despite the potential efficiency benefits of mass food production, the added environmental costs remain considerable.

however has been given to the environmental performance of the restaurant industry. Particularly pertinent with the current political focus on energy independence and efficiency, it is surprising that the most energy intensive of retail businesses, using five times the energy of any other commercial space (National Restaurant Association 2009), has been so overlooked.

One stated resistance to raising environmental consciousness in the restaurant business is that the industry depends strongly on customer comfort and satisfaction, which might be disturbed by restricting resource use. Pricing, menu items, service and atmosphere all affect a consumer's decision of where to spend their food dollars. For business owners, customer satisfaction is top priority. It may astonish restaurant owner-managers to know then that in a recent survey conducted by the National Restaurant Association 62 percent of Americans said they are likely to make a restaurant choice based on how environmentally friendly a restaurant is. Suddenly addressing environmental concerns seems to take on a very real monetary value. Or at least the customer's perception that a restaurant is addressing environmental concerns is becoming increasingly important to the businessmen behind the scenes.

Though gaining little public attention, the business of restaurant greening has gained significant momentum since the turn of the century. According to a report by the National Restaurant Association in 2008, nearly one-third of restaurants said they are allocating a larger percentage of their budgets toward going green. In fact, the NRA itself has made eco-efficiency a top priority and recently launched a web campaign called conserve.restaurant.org to educate restaurant professionals on environmental issues concerning their business. Yet what exactly it means to "go green" may not be as simple

as it sounds. Use of energy, water and land unquestionably factor into the environmental impact of a business. Waste management also poses clear problems and relatively routine solutions involving recycling, reducing toxins, and an overall reduction of excess materials. Food quality however introduces some more complicated issues concerning nutritional value, organic production, local sourcing, and offering vegetarian options. Restaurateurs may subscribe to all or some of the above environmental approaches in order to describe themselves as “greening”. This study is not concerned with defining “green” but rather focuses on how these efforts to improve environmental performance are carried out.

Restaurants are an important case study in environmental action for several reasons. First, they are extremely vulnerable to public perceptions and thus respond quite differently to environmental pressures than distanced industrial operations which experience no direct consumer contact. Because there are typically so many choices when it comes to eating and because changing where to dine is so easily done, a shift in customer perceptions can dramatically affect sales. Second, food systems have recently taken center stage in popular literature, generating a higher demand for knowledge of environmental issues concerned with eating, and thus challenging food industries more than ever before. Books like Michael Pollan’s The Omnivore’s Dilemma, Eric Schlosser’s Fast Food Nation and Marion Nestle’s Food Politics are instigating critical investigations of America’s food systems. Though these books focus a great deal on human health they all also draw attention to the environmental hazards of the current food production system and have opened up critical perspectives on food operations in America. Third, energy is likely to be the largest crisis of this century. Restaurants use

five times the energy of the average retail industry and thus have a profound impact on energy usage nation-wide. Fourth, the food service industry has performed markedly poorly in improving its environmental performance. In a study by Climate Counts creating “scorecards” for industries to evaluate their actions to slow climate change, the food service industry was ranked the worst. The Food Services sector had the lowest average (11.5 out of 100 points) of any of the eight sectors and displayed the smallest overall improvement (Environmental Leader 2008). Knowing that restaurants use enormous amounts of energy and have reacted notoriously poorly to environmental concerns, it is crucial to address *why* exactly these environmental shortcomings continue to plague such a fundamental and flourishing industry. As the percentage of food dollars Americans are spending in restaurants has doubled over the last quarter of a century, this industry becomes increasingly important to our social and environmental wellbeing.

Research Question

Not all restaurants are created equal, however, and addressing the entire industry as a whole can be misleading. A megafanchise with hundreds of locations manages itself much differently than a local mom and pop shop. In the past few decades larger companies such as Starbucks and McDonalds have been under a great deal of pressure from environmental groups that threaten to tarnish their public images with harsh criticism. On the other end of the spectrum, small businesses which are closely linked with their local population might consider environmental standards as part of responsibility to their communities. The motivations and strategies of environmental action in corporate restaurants and locally-owned eateries can be extremely diverse and this study aims to understand and compare these distinctions. This project seeks to

provide insight into how environmental decisions are made in restaurants; what influences them, how they are enacted, and how these decision making processes affect eventual outcomes.

Moving towards environmental sustainability and supporting local businesses is often lumped together in today's emerging ethic of "going green". But are independent businesses really the most progressive in enacting a policy of environmental consciousness? Or are large businesses jumping on the "green" bandwagon faster and more efficiently to boost public relations? Does the individual attention of a small-scale enterprise lend itself to efficient environmental upgrades or do large-scale institutions benefit from flexible cash flow for total renovation? Are national organizations inhibited by bureaucracy or does their large staff allow for more expert environmental attention? The ultimate question posed by this study is simple; how are restaurants of various sizes responding to environmental concerns?

I hypothesize that locally owned restaurants find themselves much less flexible to shift towards environmentally conscious practices than larger businesses. Larger businesses would likely have more resources to devote to specialized concerns such as the environment, with a large number of staff and the capacity to assign duties to an environmental expert. Small restaurants on the other hand often rely on a few staff to perform a vast number of tasks and thus the environment risks falling lower on the agenda, competing with the more immediate concerns of day-to-day management.

Methodology

Environmental Decision Making

In the social sciences, environmental studies have typically been subdivided into politics, law, ethics and economics of the environment as key fields in investigating the human relations with the natural world. These disciplines help to systematically investigate the human processes relating to the environment, yet they can also unintentionally create artificial boundaries. Much like in the ecosystems they assess, these isolated social components of environmental studies are in fact elements within a complex web of relationships. Each discipline remains inextricably linked to the others. The researcher finds it difficult to pin down exactly under which discipline this study would fall. Rather than isolating one of these theory-based perspectives from which to analyze an environmental issue, this study seeks to gain a holistic, interdisciplinary view of a specific industry's case. From a multi-faceted perspective, this project investigates how environmental decisions are made in the restaurant industry.

Environmental decision making draws together the areas of business and the environment, environmental ethics, business ethics, environmental economics, environmental policy and even psychology. The reason for using the “decision making” approach is simple. As much as disciplinarily focused academic rhetoric may describe the relationship between humans and the environment, the most tangible human response to issues of the environment comes at the moment where a decision is made. This decision might be made by an individual or a group of interested parties. Though seemingly simple, the process of decision making can be extremely complex, surprisingly

subjective, and yet absolutely essential to understanding the actions taken which affect our natural environment.

Interview Process

Because decision making entails economic considerations and ethical motivations, as well as perceptions of one's position in relationship to society and the natural world, a semi-structured interview was deemed the most valuable way to extract this complex information from informants. A semi-structured or "depth" interview is a form of formalized conversation which aims at gaining knowledge by using a set of prepared questions, but remains deliberately half-scripted so as to allow for both specificity and depth (Wengraf 2001).

Each semi-structured interview began with a discussion of the over-all environmental principles guiding the business, if any, and then proceeded to address specific aspects of environmentally conscious action. Energy efficiency, food quality and sourcing, waste generation and management, and publicly available information were all addressed in detail. Though the questions began as factual, each response was followed by a qualitative inquiry into why or why not an action was taken. The real data came not from tallying the number of restaurants using compact fluorescent bulbs, but rather from understanding how the choice to accept or reject this available technology took place. The flexibility of the process also created the opportunity for the informant to elaborate as much as possible on any given topic and thus allowed the introduction of ideas that may not have been acknowledged by the researcher.

The key comparison in this study depends on the size and level of independence of the restaurant, thus information was collected from both large franchises and small

locally owned businesses to allow close comparisons between the two vastly different manifestations of the same sector. Of course interviewing restaurant managers who are employees of large corporations has weaknesses in comparison with talking to small business owners themselves, notably in that the researcher cannot directly access the key decision makers and that these decision making processes may involve a complex network of individuals. But these interviews helped to uncover what corporate managers at least perceived to be the decision making process behind their restaurant's environmental performance, and thus added depth to the official textual information provided by the company itself.

The Delmar Loop Context

All restaurants addressed are located within the vibrant Delmar Loop District of St Louis Missouri. This shared regional element reduces the effect of factors such as setting, clientele, history, and most of all avoids variables in legal code or political situation. Though the data retrieved pertains to this specific geographical area, the sample was selected in particular for its generalizability. The Delmar Loop borders neighborhoods of varying income levels and racial backgrounds and thus is not obviously limited to a particular population demographic. The restaurants on the Loop also represent a variety of histories, including businesses established for many decades as well as those which have existed merely a few years. Though the Delmar Loop is located in close proximity to the liberal-leaning Washington University, it is known for its diverse clientele coming from throughout the city and is likely reflective of the St Louis area's relative political equilibrium. One hesitation to generalize data from the Delmar Loop might be that its concentrated diversity of clientele and industry may be more exceptional

than representative, as it was highlighted by the American Planning Association as one of America's Great Streets due to its eclectic mix of revitalized local business. This fact however does little to jeopardize the generalizability of environmental decision making within its bounds. This research perceives the exceptional diversity of the Loop as more of an asset than an inhibitor in potentially applying the information garnered to a wider view of the restaurant industry.

Restaurant Selection

Restaurants participating in this study were selected because they demonstrated at least some effort or interest in improving their environmental performance. In exchange for their time, each participant was provided a list of environmental resources for restaurants in the St Louis area³ compiled by the researcher. It was determined that given the limits of time and resources, the most useful information could be derived from businesses already in the process of considering environmental issues. Evaluating the reasons why certain institutions have neglected to adopt any environmental actions at all would be a valuable study for future research; however this project aims to consider the differences between small and large scale industry methods of incorporating environmental change and thus requires some level of initial involvement. In order to get a relatively thorough perspective on the issues at hand within a limited time period, 9 restaurants were selected to participate in the study representing 4 large franchises and 5 local businesses. The original intention was to obtain data from 12 locations with equal numbers of large and small business models but due to unresponsiveness from some parties only a rough 4:5 balance was achieved. The corporate restaurants involved included Starbucks Coffee, Chipotle Mexican Grill, Panera Bread, and Ben and Jerry's

³ See appendix pages 91-93.

Ice Cream. The independent restaurants interviewed were Boosters Café, Blueberry Hill, Riddles Penultimate Café and Wine Bar, Meshuggah Café, and one other which preferred to remain anonymous.

Textual Sources

In addition to the original research described above, an extensive literature review was conducted. The materials drew from both non-academic and academic sources. Non-academic sources included restaurant industry magazines, environmental certification programs, internet blogs, newspaper articles, and other environmental or restaurant focused internet sources. The academic literature included focused articles from business, environmental and ethics journals, as well as full-length texts addressing the relationship of business and economics with the natural environment over the last century.

Limitations

The study aims to represent a microcosm of environmental decision making in the restaurant industry as a whole, and yet is limited to the finite knowledge of 9 restaurants in the St Louis Delmar Loop District. The research sample size itself was a limitation in that although it may have been desirable, to conduct any additional interviews would have compromised the depth and completion of the study given the time constraints of an Honors thesis. Three institutions also failed to respond to repeated requests for interviews and thus were not incorporated in this study despite their relevance. Two of the large franchises evaluated in this study did not respond to interview requests, but the existence of publicly circulated literature allowed for analysis in the absence of a personal interview. This information was ultimately limited to what was publicly available. The use of personal interviews also introduces several limitations.

The willingness of participants to share information as well as their understanding of the issues at hand varied greatly. For most restaurant owner-managers there were many gaps in their knowledge of their business' environmental practices and thus not all aspects of environmental concern could be evaluated for every restaurant. For example many were not aware of recycled paper products in use or water usage practices by kitchen staff.

Time, responsiveness of participants, and environmental awareness of interviewees comprised the primary limitations to this study.

BACKGROUND

Research in Environmental Decision Making draws together ideas from several different disciplines. The following section provides a brief background on how economic, ethical, and business theory relate to the environment.

Economics of Business and the Environment

Tradeoffs represent a basic principle of economics. When a restaurant owner-manager or CEO must decide between using cheap non-biodegradable Styrofoam containers or buying expensive recycled packaging a clear switch is being considered. Solid monetary profit can be exchanged for a less-tangible notion of environmental protection. Choosing expensive packaging seems burdensome. The equation appears simple. An environmental economist would add however that the true cost of the environmental damage caused by Styrofoam is not being properly accounted for. This cost is borne by society as a whole, distributed such that no party maintains responsibility for it; it is thus deemed an externality. An externality is defined as the occasion when “in competitive equilibrium, the (marginal) conditions of optimal resource allocation are violated” (Buchanan, Stubblebine 1962). Therefore in order to make the equation balanced one would need to impose a cost somewhere in the life-cycle of the Styrofoam, such as a tax on producers or consumers, to adequately represent the cost of that option. But even this scenario may not accurately represent the choice at hand. The philosopher Alan Holland, challenges this perspective entirely by posing the question “Are Choices Tradeoffs?” (Holland 2002). Holland, like many environmental economists, is troubled by the notion that all values can be balanced on the same scale, with a single unit of measurement: dollars. He argues that considering all decisions as tradeoffs fails to truly

represent incommensurable values. Environmental degradation cannot simply be reduced to the monetary value of its impact on society, and the way in which individuals approach environmental degradation does not usually occur in proportion to its value in dollars. Thus the traditional economic model of trade-offs lacks some important element of understanding human values and behaviors.

Holland attempts to incorporate ethical and psychological viewpoints in his “More Adequate Model of Human Agency” (Holland 2002). He underlines the importance of how individuals are responsive to social and institutional phenomena. The notion of what is “right” and appropriate in the context of a society matters. He emphasizes how decision-making relates to notions of identity and integrity. Choice, he asserts, is an identity affirming action and thus depends heavily on an individual’s self image as well as on external factors. History and memory also play a role, in that individuals are constantly interpreting and reinterpreting the past, and choices are made within this framework of consciousness. In addition, Holland makes a point to consider certain inexplicable human tendencies such as curiosity, which might lead to an economically unexpected outcome. All of these adjustments to the traditional model essentially account for what economists would consider “irrational” behavior, behavior that does not maximally benefit the decision maker. According to Holland, the conventional trade-offs model is calculative, utilitarian, and neglects the significance of any given piece of information’s origins. Holland’s ideas could also be extended to describe commercial entities which find themselves within a particular social and historical context. Restaurant management, though not always the responsibility of a single individual, still relates to “human agency” in that decisions are still being made by

humans in consideration of their context. Whether it is a group of corporate elites or a single business owner considering environmental changes, the social, historical and political climate inevitably affect how these decisions are made. Just as individuals maintain an identity which affects decisions, corporations maintain a public image which bears heavily upon choices made. The history of a business (much like that of an individual) including its origins, overall mission, and environmental record affects how decisions are made. And human traits like curiosity play out in the business world as well, taking certain seemingly illogical entrepreneurial risks and potentially sparking new development. Holland's concepts play out strongly in this study of the restaurant industry and bring to light the blend of economics, ethics and psychology which take place in environmental decision making, notably in a business so connected to consumer approval.

Some environmental economists advocate a more quantitative approach. This poses difficult problems because ethical concerns are given primary importance and yet do not easily convert to numeric valuations. Economists have tried to provide some monetary scale for understanding ethics by demonstrating that peoples' values can be expressed through their preferences. The most frequent method of evaluating ethics quantitatively is through assessing an individual's "willingness to pay" (WTP) or "willingness to accept" (WTA) certain conditions by asking a series of preference questions. Though most often utilized by policy makers when considering a new environmental law, this approach to evaluating various options remains relevant to understanding how decision makers think about their environmental choices. Restaurant owners in this study, for example, are likely to estimate (albeit less systematically) the

willingness of customers to pay a premium for higher environmental standards at their business before making a choice to take environmental action. The WTP technique is questionable, however, chiefly because it remains entirely hypothetical in nature. How a person responds to a hypothetical question and how one actually acts can be incredibly different, and thus using this method to predict human behavior as an extension of their values remains tenuous. WTP is thus considered an applicable but not infallible approach to making environmental decisions.

Theoretical economic principles of balancing and valuation are crucial in understanding this process of environmental decision making. Restaurant owner-managers, like other economic actors, respond to environmental concerns not only with respect to costs and benefits but also their own histories and identities, the context under which their decisions are made, and expectations for consumer response.

The Business Side of Environmental Ethics

Economics has been criticized for taking an overly mechanistic approach to environmental issues and failing to fully incorporate the element of human values into decision making. Texts addressing environmental ethics provide intricate and nuanced perspectives on human valuation of the environment, yet in the business world these ideas tend to be significantly simplified. To understand the environmental choices of a corporate or local restaurant, one must understand the two major schools of thought dividing environmental ethics in the business world today; anthropocentric environmentalism and the intrinsic value of nature. The term anthropocentric environmentalism refers to a view of the world view in which the value of the environment is judged solely on its usefulness to human beings. This school of thought is

also referred to as the “conventional paradigm” (Tilley 2000) in which human use of the environment determines how the environment is valued. Anthropocentric environmentalism emphasizes the threats to human welfare posed by damage done to the natural environment, both those presently existing and future people, and suggests recourse such that future generations will not have to suffer. This human-focused perspective often pairs with the subtly biblical concept of man’s “stewardship” of the earth, and his duty to preside over it. When concerns for economic prosperity are woven in amongst these notions of environmental preservation for future peoples, the premise is referred to as sustainable development. The term, as popularized by the United Nations Brundtland Commission in 1987, is defined as development which “meets the needs of the present without compromising the ability of future generations to meet their own needs” (Redclift 1987). In the business world, the discourse of anthropocentric environmentalism appears alongside promises of economic growth practically without exception. For example, the United States Business Council for Sustainable Development proclaims its underlying value as “demonstrate(ing) the business value of sustainable development” through projects that “are designed to create value through economic returns and environmental and social benefits” (USBCSD 2007). Businesses after all create products and services for human use, and thus their primary environmental concern is to avoid activities which may detract from human quality of life. Through the concept of sustainable development this notion has been extended beyond current consumers to be applied to the present poor and to future generations.

Not all businesses however subscribe to the concept that human use is the only incentive for environmental preservation. There are a growing number of businesses

focused around the concept of “earth for earth’s sake”. This notion implies that the Earth’s elements, creatures, and natural systems have intrinsic value beyond human uses. This intrinsic value may entail the valuing of all living creatures as individuals, or a systemic valuing of ecosystems and/or species. Advocates of this ethic often see fault in separating mankind from the natural world and seek to situate humans within the wider context of life on Earth, though some may still see human beings as maintaining particular importance. Intrinsic value of the environment proposes an ecocentric view in which the environment possesses values beyond its potential for human use where as anthropocentric environmentalism considers the environment with respect to human needs.

Whether anthropocentric or ecocentric, in the business world approaches to incorporating environmental ethics vary widely. The size of a business can determine a great deal about how ethics are approached. Large corporations today often have an official statement or policy regarding their environmental position. Even if this is not specifically environmental, there is at least a document addressing Corporate Social Responsibility. A recent article in Forbes Magazine describes the increasing pressure to develop a plan for Corporate Social Responsibility as “executives are repeatedly informed that by demonstrating concern for the environment, human rights, community development and the welfare of their employees both in the U.S. and abroad, they will make their firms more profitable” (Noer, Ewalt & Weiss 2008). The extent to which these proclamations may be more strategic than ethical is a legitimate critique, but it will suffice in this context to confirm that some level of environmental concern is officially addressed.

Small enterprises however do not always explicitly address these issues and evaluating their ethical standpoints tends to be much more subtle. In a study entitled “Small Firm Environmental Ethics: How Deep Do They Go?” Fiona Tilley seeks to better understand the perspective of small business managers. She assesses the environmental ethics of 60 small firms and concludes that the businesses displayed an overwhelmingly “shallow” environmental strategy. She claims that “the discipline of small firm environmental ethics is in an embryonic state” (Tilley 2000). Tilley explains this weak ability to self-regulate by describing the desire amongst small business owners for external forms of regulation such as legal obligations. She also remarks upon the low eco-literacy of small business owners. Furthermore she concludes that small business owners “are seeking a code of conduct to govern their environmental behavior, rather than a new perception of the role and structure of business organizations in society today” (Tilley 2000). This study however presents a very different picture of small firms in the restaurant industry and the contrast will be a critical one. Most notably, Tilley’s assertion that small business environmental ethics are immature and unconcerned with changing business structures will be challenged⁴.

A Brief History of Business and the Environment in the US

A discussion of the current economic and ethical issues surrounding business and the environment would not be complete without an understanding of the history of these topics over the last fifty years. The relationship between business and environmental issues has changed drastically over the last half of a century, and the nature of this shift strongly characterizes how the two relate today.

⁴ See the section Results: Locally-owned Restaurants on page 60.

Environmental historians typically mark the Industrial Revolution as the birthplace of modern environmentalism and identify the subsequent intellectual movements of Romanticism and Naturalism in Europe as a reactionary movement emphasizing man's relationship to nature. But it is not until the mid twentieth century that ideas about environmental responsibility in the business world enter the mainstream. Until the 1960s, the majority of businesses considered their role as solely to perpetuate the market economy. Most businesses were concerned simply with providing goods and services such that they turned a profit. This is not to say that there were no ethical dimensions to business practice, concerns for worker health and safety go back hundreds of years, but it was widely understood that issues of environmental quality were not the concern of business owners. Nor did government play any real role in preserving environmental quality. What little pollution legislation did exist was difficult to enforce and often chiefly concerned with protecting business interests. The determination of what pollution was acceptable to the general population was assumed to be controlled by the free market (Shabecoff 2000). The 1960s however raised new concerns with respect to the role of business in the environment with a combination of mainstream industrial critique, a more radical ecocentric philosophy, and a number of eye-catching environmental disasters. In the 1970s a drastic change took place in the United States, in which the lack of faith in the market's ability to control environmental degradation instigated a wave of federal environmental legislation. The Environmental Protection Agency was established and quickly set out to establish and enforce new laws such as the Clean Water Act, the Clean Air Act, the Resource Recovery Act to address hazardous wastes, and the National Environmental Policy Act which requires federal agencies to

prepare an Environmental Impact Statement for all major actions. In addition, the government sanctioned celebration of the first Earth Day, an event designed to draw public attention to environmental concerns (Kraft & Vig 2006).

At this point in time, businesses were being held more accountable for their environmental effects, but only in so far as they complied with government regulation. There was no expectation that industries should independently improve environmental performance beyond these judicially enforceable guidelines. Yet concerns for environmental quality continued to rise as dramatic incidents of industrial pollution continued to occur. Toxic chemical waste buried beneath Love Canal in New York caused high rates of miscarriages and birth defects. The Amoco Cadiz oil spill off the coast of France spoiled 76 beaches and devastated local sea life. The escape of toxic gas from a fertilizer plant in Bhopal, India resulted in the death of thousands. These environmental disasters kept environmental issues active in the public forum.

The 1980s saw a swing back to political conservatism and under this predominant paradigm of deregulation and market philosophy, government intervention into environmental issues was avoided. In response independent environmental interest groups became increasingly organized. As these groups' support gained momentum and general prosperity spread throughout America in the 1990s, a "new era of environmentalism" took hold (Smith 1993). Denis Smith characterizes this new wave by four characteristics: public concern, green consumerism, diffusion of ecological values to the mainstream, and intensified regulation. In general the position of environment within the public consciousness became a bottom-up affair. Smith plausibly argues that

businesses were increasingly pressured not by the government nor even by environmental interest groups, but by consumers themselves to become more “green”.

As we near the end of the twentieth century it seems this trend toward consumer responsibility has become magnified. Consumers are not merely demanding more environmentally sensitive products, but potentially changing the value system of business as a whole. Though ethical issues in business gained momentum throughout the 1980s and 1990s it was not until the 2000s that policies of “Corporate Social Responsibility” (CSR) became the norm. The focus now is to become pre-emptive, to prevent environmental damage before it begins, and this is accomplished through an established code of responsible behavior⁵. These official CSR policies however, are only prevalent amongst large organizations with pressure from public interest groups and stock holders. Small businesses have no such ethical standard at this point in time, but many have taken a similar stance in a less formalized manner.

It is important to note here that the development of environmental consciousness is not simply a cumulative process, nor can it be characterized as cyclical or temporary, but rather a function of the socio-historical situation (Smith 1993). For example, today’s environmental consciousness focuses greatly on energy use; this topic has been spotlighted due to American political involvement with global oil supplies as well as awareness of the global warming effects of fossil fuel combustion. In the 1990s industrial pollution was much more prevalent in the general environmental consciousness in response to the Exxon-Valdez oil spill near Alaska and the Sandoz chemical spill into the Rhine River. Therefore the current environmental trends must be seen in context, not as

⁵ This trend toward Corporate Social Responsibility is not necessarily altruistic however and has often been accused of less-honorable intentions and insufficiency. For more on this see the Results subsection concerning greenwashing on page 56.

better or worse than previous movements, but rather as a function of their social, political and historical climate.

Today's restaurant industry finds its environmental impacts highlighted by the growing emphasis on consumer-driven environmentalism and a sense of community responsibility. The food service sector has never before experienced such scrutiny from an environmental perspective, chiefly because it does not have the same potential for large-scale disasters that industrial production companies do. Now that we are in an era focused on energy and carbon dioxide pollution, issues which involve the cumulative results of small actors rather than the immense impact of a single actor have taken on growing importance. The sense of environmental responsibility has now spread to sectors traditionally not thought of as having the potential for environmental harm. Restaurants have rarely been regulated on environmental terms, are relatively new to adapting to changes in environmental consciousness, and are subject to a unique model of twenty-first century social corporate responsibility.

This study also took place during a tense political moment, the presidential race between John McCain and Barack Obama, in which the status quo was being challenged by both sides as both parties promoted drastic change. Though differences in environmental policy were not particularly prevalent, the overall sense that America as a whole was on the brink of a large shift was notably reflected in this study. The economic aspects of environmentally conscious actions were also highlighted by the economic crisis beginning in October of 2008 and had a profound impact on the data collected from restaurant owner-managers. This unique socio-historical moment plays a critical role in understanding environmental decision making in the restaurant business today.

Additionally, issues surrounding food have gained rising attention in the past several years. The book *Fast Food Nation* published in 2001 and the related documentary film *Super Size Me* in 2004 drew dramatic public attention to American eating habits and food production systems. The increasing development and use of genetically modified crops in the late 1990s and into the 2000s has stirred controversy over the biological, health-related, and economic repercussions of American food systems. Public concern about a rapidly growing global population has spurred heated debates over the sustainability of current food production methods. Rising fears of losing the heritage of small family farms to impersonal industrial agriculture have given rise to an increasing cultural valuation of “slow food”. Books like Michael Pollan’s *The Omnivore’s Dilemma* have raised interest in the choices implicit in current modes of eating. Overall, food has taken a central place in popular media, the political arena, intellectual discourse, and cultural discussion. This broad acknowledgement of food issues has undeniably influenced the approaches restaurants take toward their perceptions of environmental concerns and their resulting actions.

ENVIRONMENTAL ISSUES AND THE RESTAURANT INDUSTRY

Environmental issues can encompass such a wide range of subject matter that it is important to specify what issues in particular are most significant in the restaurant industry. This section will briefly address each major category of environmental interest affecting restaurants and then outline current strategies for confronting these issues. Special attention will be paid to how these issues affect Missouri and St Louis in particular when possible.

Energy

The Problem

The most common topic within environmental discourse today is undoubtedly energy. The prominence of energy issues relates closely to current political concerns over American energy dependency as well as environmental concerns about global climate change. The use of fossil fuels which produce energy, such as oil, coal and natural gas, has been highlighted as the ultimate “unsustainable” practice in that these resources are finite. In addition, burning fossil fuels produces harmful byproducts such as particulate air pollution, green house gases, and in some cases toxic waste. It has been publically recognized by the awarding of the Nobel Peace Prize jointly to the International Panel on Climate Change and Al Gore, by the new Obama administration’s renewable energy agenda, and by the popular media that a shift in the sources of energy as well as their usage is a high priority.

Restaurant Situation and Solutions

The restaurant business is one of the most energy intensive industries in the commercial sector, utilizing five times the energy per square foot of any other commercial space (National Restaurant Association 2009). Roughly a third of restaurant energy is generated through cooking, a bit less than a third on heating and cooling, and the remainder on dishwashing, lighting and refrigeration (in that order)⁶. As energy prices increase roughly six to eight percent each year, energy usage has also become increasingly costly to businesses. The Pacific Gas & Electric's Food Service Technology Center estimates that in California alone the food service industry spends about 8 million dollars on cooking, holding, and storing food each year (National Restaurant Association 2009). And yet energy efficiency has also been considered one of the simplest cost-saving methods for restaurants. The Environmental Protection Agency estimates that "if a restaurant cuts its energy costs by just 20 percent, profits could increase by 30 percent or more" (National Restaurant Association 2009).

The strategies for increasing energy performance include a slew of low-cost conservation methods as well as the possibility for investing in more costly energy-efficient equipment. To address heating and cooling costs restaurants can lower their thermostat at night, seal off unused areas, or allow solar heating by opening window dressings in the winter and closing them in summer. For dishwashing efficiency, employees can make sure that the dishwasher is completely full before running a load. Energy-efficient lighting is also available in the form of compact fluorescent bulbs, or LED lighting in place of conventional incandescent bulbs. Making sure idle electrical

⁶ Energy is also consumed by the production and transportation of the food itself, as well as its disposal. This study however remains focused on resource use within the restaurant itself and how decisions are made concerning its moderation.

equipment such as computers are turned off when not in use can also impact a business's energy usage over the long term.

In terms of cooking and refrigeration, there is little option available other than purchasing higher efficiency equipment. The high turnover rate of the restaurant business however might make this long-term strategy less appealing. But if the initial burden can be taken on, efficient technology ultimately saves money. This equipment on average lasts 10 to 15 years and cuts 25% of energy usage (Food Service Warehouse 2009), creating an over all cost benefit if the restaurant owner can afford the initial investment. "Energy Star" is a label created by the EPA to indicate a high level of energy-efficiency and tax credits may be available for purchasing this equipment depending on the region. If the restaurant is in the market to construct a new building, tax deductions are available for energy-efficient buildings. But there are also the lesser-known "partial federal tax deductions of up to \$.60 per square foot for "green" measures affecting any one of three building systems: the building envelope, lighting or heating and cooling systems" (Conserve Now: Facts and Stats Deductions).

Local Conditions

In Missouri, coal is the dominant fuel source typically supplying around four-fifths of the electricity market. Practically all of Missouri's energy is imported and nine-tenths of this coal travels nearly twelve hundred miles from Wyoming. Of the remaining electricity, almost all is produced by a single nuclear plant in Fulton and the remaining two percent comes from renewable hydropower (Energy Information Administration 2009). In the scheme of conventional energy production methods coal produces the most carbon dioxide by far. This means that for those living in Missouri and concerned with

global climate change, energy is an especially pertinent issue. Restaurants use a great deal of coal sourced electricity but also commonly cook with natural gas. Missouri has no natural gas reserves but profits from being crossed by several interstate pipelines transporting gas from Colorado, Arkansas, Texas, and other states (Energy Information Administration 2009).

Natural Resources: Water and Paper

Water

The Problem

Water usage is a concern first and foremost because it is a scarce resource. The United States currently extracts ground water at a rate which has depleted resources and concern is growing over water-related conflicts that might arise in the future. According to the United States Geological Survey, this depletion of aquifers now occurs not only in dry Southwestern states, but across the country (US Geological Survey 2003). Some experts have suggested that “by 2013 more than 70 percent of the US states will experience some type of local, regional or state-wide water shortage” (Understand the Issues: Water Use 2009). This water depletion affects not only the quantity and quality of drinking water for the human population, but also impacts ecosystem function and wildlife.

Restaurant Situation and Solutions

Each restaurant in America utilizes a massive amount of water each year: 300,000 gallons on average (Nielsen 2004). In the kitchen, water is used for steamers, combination ovens, pasta cookers, steam tables, sinks, sprayers, and dish washing. In the dining area water is typically served to all customers and employed in conventional

bathroom fixtures. Reducing water consumption can benefit a restaurant directly by reducing the water bill and by cutting down on the costs of heating the water. Restaurants can decrease their water usage either through behavioral changes or technological improvements. A restaurant may choose to only serve water to customers upon request. Some establishments utilize dip wells which require constantly running water and this method can be altered to reduce flow. Ensuring that dish washers are run with a full load also cuts down on superfluous water use. Using brooms to clean patios rather than spray washing can also eliminate unnecessary usage.

Local Conditions

Water usage is not often recognized as a concern in the Midwest where current supplies are widely believed to be plentiful. However, a recent study of Missouri's statewide water use by the Department of Natural Resources stated "water supply quality or quantity threats exist in every watershed. Left unchecked, these threats can negatively impact drinking water supplies, agricultural water use, recreation, tourism, fish and wildlife, and business and industrial water uses" (Missouri State Government 2008). In particular, increasing urbanization and a growing population in the Eastern part of the state have put pressure on aging water systems stressed by both capacity and supply limitations. The price of water has typically remained low across the country; however, as of November of 2008 St Louis County experienced a 17.94 percent increase in water rates. It may be suggested, therefore, that attention to water use will soon be on the rise.

Paper

The Problem

Paper represents another natural resource of concern: forests. Deforestation has long been recognized as an environmental problem as it leads to the destruction of lands that are aesthetically, biologically and commercially valuable. One fifth of wood harvesting world wide is attributed to paper production (World Watch Institute 2008). Loss of forests leads to habitat destruction and soil erosion which alter natural ecosystems dramatically. Though replanting by logging companies does occur in most developed countries, it is not commonplace in developing nations and happens at nowhere near the rate necessary to replace existing forests worldwide. Global forest cover continues to decline (Food and Agriculture Organization of the United Nations 2005). On a global scale, trees consume carbon dioxide and thus reduced tree-cover means less opportunity to hold back the chief contributor to climate change. The process of paper making itself can also be environmentally hazardous as it typically requires large amounts of water and chemicals which pollute the environment. But perhaps most noticeably of all, paper is inherently disposable, and thus an unsustainable use of resources⁷. Roughly half the paper produced today is utilized as packaging and after its brief use ends up accounting for nearly forty percent of municipal solid waste (World Watch Institute 2008). Much of this cannot be recycled due to contact with food. The resulting landscape of landfills can lead to pollution of land and water, off-gassing of methane (another, more potent, greenhouse gas), and destruction of natural habitat.

Restaurant Situation and Solutions

⁷ It may be argued that reusable products might also require significant water and energy to wash and reuse and thus are not necessarily preferable to paper. However, the amount of water required to manufacture paper products (1 ton of paper requires 300-400 cubic meters of water) far exceeds the water used to clean and reuse non-paper products, even over an extended period of time. Reusable products also protect virgin forests and avoid disposal into landfills. Energy usage may be higher overall with reusables but the advantages of forest and habitat protection could justify this added use of energy.

In restaurants paper is used primarily for disposable items such as napkins, to-go packaging, paper towels, and bathroom tissue. Paper usage in restaurants can be addressed by limiting paper usage and by purchasing paper products which are more resource conscious. Ecologically friendly paper choices range from having increased recycled content, to refraining from the use of toxic bleaching agents, to coming from sustainably harvested forests. Once the paper has been used however there is little one can do to salvage it. Though city-wide post-consumer paper recycling programs are widely available, this does not typically apply to restaurants as food contamination automatically eliminates the possibility for any recycling.

Local Conditions

Missouri in particular does not have any specific ties to paper production which occurs mostly in the South Eastern United States and abroad. However, it is important to note that in comparison to other countries United States paper consumption is the highest in the world. “While the U.S. has only 5% of the world's population, it alone consumes over 33% of the world's production of paper.” (Bureau 1989). Perhaps not on a local level, but surely on a national scale, the tremendous use of this precious natural resource must be recognized.

Waste

The Problem

Waste refers to undesirable items which are discarded. Since 1989 the Environmental Protection Agency has implemented a waste management hierarchy, which prioritizes different methods for addressing municipal solid waste. Source reduction and product reuse on-site are top priority, followed by recycling, combustion,

and finally disposal into landfills. According to a 2007 study, 33.4 percent of waste is recovered for recycling, 12.6 percent is sent to the incinerator, and 54 percent is discarded (US EPA 2007). Reducing waste involves putting pressure on industries and individuals to abstain either from wasteful habits or reuse their own materials. For those items that must be disposed of, recycling is currently available (depending on the local processing plant) for most plastics, glass, aluminum and paper products. Organic wastes such as food and yard waste can also be recycled through composting. Incineration involves burning organic matter and often has the benefit of capturing the energy released in the process. Though incineration technology has advanced to eliminate most hazards to human health, some concerns remain over the release of heavy metals into the air which can be toxic even in small doses. As mentioned in the previous section, the largest proportion of waste processing, dumping into landfills, poses numerous threats to the natural environment and is considered to be an unsustainable method of waste management. In addition to the harmful environmental effects caused by large mounds of decomposing waste, landfills might also be filled with non-biodegradable items, which will never break down over time.

Restaurant Situation and Solutions

Restaurants primarily produce waste in the form of paper, glass, polystyrene, grease and excess food. The strategies available for managing this waste include eliminating non-biodegradable wastes, reduced use of disposable materials, recycling, and composting. Eliminating non-biodegradable polystyrene, commonly referred to by the brand name Styrofoam, is perhaps the simplest way a restaurant can cut down on harmful waste. Cutting back on disposable products can also help, such as using cloth

napkins in lieu of paper. Glass bottles, plastic containers, and paperboard boxes can be separated for recycling. The most egregious waste problem in the restaurant industry however is food waste. The EPA estimates that more than 25 percent of all prepared food goes uneaten every day (National Restaurant Association 2009). The two main strategies for addressing food waste are donating excess food to local food banks and composting. Food donations require quite a bit of effort however on the part of the restaurant and depend greatly on collection programs available in the area as well as certain legal restrictions. Composting however can be an easier solution for food waste as it turns excess food, as well as soiled paper products, into valuable soil. For most restaurants however, space, time and transportation create limitations to improving their waste management schemes. Kitchens typically provide little space for sorting materials and time constraints often prevent employees from doing so. Even if recyclables and organic wastes can be effectively separated, transporting this load to the proper facility may require additional costs.

Local Conditions

In University City, the municipality in which this study took place, there are a number of options for a business to improve its waste management. Recycling of glass, aluminum, paperboard, and all plastic types except for #6 is available, though pick-up of these items is not complementary. Food waste can be managed locally by donations and by composting. Just around the corner from the Delmar Loop sits the offices of Operation Food Search, a non-profit dedicated to collecting excess food and providing it to St Louis Area food banks. Numerous area composting facilities also accept food waste.

Food

As growing attention has been paid in recent years to food quality in the United States, the type of food sourced to restaurants becomes increasingly important. The following is a brief overview of major trends in environmentally conscious food consumption. Though each category addresses a specific environmental problem, it is possible and common for these designations to overlap.

Organic

Proponents of organic foods seek to avoid the potential damage caused by the artificial chemicals and crude processes of conventional farming. It is argued that both human and environmental health may be endangered by these practices. Worries about harmful chemical residues, ground water contamination, hormone use in animals, ecosystem imbalance, reduced wildlife, superweeds, soil erosion and the high use of fossil fuels amongst others have encouraged organic farmers to rely on alternative growing methods. Title 21 of the 1990 Farm Bill created the Organic Foods Production Act, which established a legal framework for defining the term “organic”. The USDA specifies that

“Organic agriculture is an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity.

It is based on minimal use of off-farm inputs and on management practices that restore, maintain and enhance ecological harmony” (Gold 2007).

With the caveat that not all residues can be eliminated, organic “methods are used to minimize pollution from air, soil and water”. The Act concludes that “The primary goal of organic agriculture is to optimize the health and productivity of interdependent

communities of soil life, plants, animals and people.” Though the Act does not explicitly state preferred methods, certified organic farms at the very least refrain from using synthetic herbicides and pesticides, ionizing radiation, and sewage sludge.

Organic produce is almost always more expensive than conventional produce (Dimitri, Oberholtzer 2005), primarily due to higher production and distribution costs as well as federal subsidies benefiting conventional industrial farming. This remains the chief deterrent for cost-conscious restaurant owners. Though some restaurants choose to use exclusively organic ingredients, it is also common for a business to source specific organic items. According to the philosophy of the decision-makers, organic food may be chosen for its benefits to human and environmental health or simply for its taste.

Local

Three major concepts drive interests in local food; environment, local economy, and culture. Local food is often considered to be more environmentally friendly because it travels fewer miles to reach its destination and therefore burns less fossil fuel, emitting fewer climate change-inducing carbon dioxide molecules into the atmosphere. This has been contested however by the view that fewer large vehicles transporting mass quantities of food across the country may actually use less fuel than numerous small trucks carrying produce to local markets (The Economist 2006). On an economic level, local food is seen as a way for individuals to strengthen their communities by supporting small farms and local jobs. Frequently this concern for investing in local communities relates to the cultural importance of food. Eating locally implies eating seasonally, and the food produced at a particular time of year often ties in closely with local cultural traditions. Though not exclusively concerned with the natural environment, local foods

are one way in which people have sought to curtail the use of fossil fuels and support their communities.

Restaurants typically source food items from a single distributor. Large food distribution firms rarely take the locality of their product into account when arranging deliveries. Therefore it often takes much more time and effort on the part of the restaurant manager to organize the delivery of locally produced items. In addition, local foods are subject to seasonality. Though some restaurants have embraced the practice of constantly changing their menus to suit their supplies, the vast majority use static menus which require the same produce to be available year-round.

Ethically Raised (grass-fed, free range)

The conventional practices of raising livestock in the United States have been condemned as unjust, environmentally hazardous, and potentially harmful to one's health. Large scale meat farms often keep animals in cramped conditions, treat them with hormones and antibiotics, and provide them with fattening feed far from their natural diets in order to churn out as much meat as possible in a short amount of time. The argument for more ethically raised meats comes from many angles. Environmental advocates highlight the fact that the high density populations of these factory farms also produce immense amounts of methane, can contaminate ground water, and may threaten biodiversity. Animal rights activists lament the cruel treatment of living creatures who often suffer physical maladies as a result of their unnatural lifestyles. Scientists suggest that the diet and medicines administered to livestock may end up negatively impacting the health of consumers. And to top it all off, some simply argue that well-fed, well-kept animals simply taste better.

The two major components of “ethically raised” meats address the major concerns over what the animal was fed and the environment it inhabited. The term “grass fed” beef signifies that the cows have been spared the harsh feed lot diet and instead provided natural grazing. The notion of “free range” can be applied to meat, eggs, or dairy farming and implies that the animals were permitted a wider range of motion and exposure to the outdoors than those conventionally raised. The label of “cage free” for eggs typically means that the chickens were kept in less crowded quarters and provided access to the outdoors. It is important to note here that none of the above terms have been standardized, and thus it has been suggested that their use may potentially be inconsistent or even misleading.

Much like organic produce, and indeed sometimes referred to as “organic” meats, these high standards of production come at a premium. The cost to a restaurant may even reach double or more the price of conventional meats. For this reason choosing ethically raised meats can be difficult for business owners. In addition, because these high-standard farms are fewer and farther between, a priority might have to be made between local sourcing and an ethically raised product.

Vegetarian

Individuals may choose to eliminate meat from their diets for several reasons including the ethical issues surrounding slaughter, health concerns, and the environmental effects of meat production. For the purposes of this study, the focus will be on environmental motivations for vegetarianism. Many are opposed to the environmental conditions presented by conventional livestock farming methods described in the above section and thus refuse to support the industry. In terms of feeding a growing global

population, plants are argued to be much more efficient than meat. Raising livestock requires not only the water and energy utilized in tending to the animals themselves but also the resources needed to grow the crops to feed the animals, especially in an industrial system where livestock are fed grain. With worries about global food supply, meat production appears to be a waste of valuable arable land. Livestock also emit vast amounts of methane gas, a potent contributor to global climate change. According to the United Nations Food and Agriculture Organization, the livestock sector worldwide produces more green house gases than transportation. Combined with the effects of land and water degradation, the UN stated “Livestock are one of the most significant contributors to today’s most serious environmental problems” (Matthews 2006). Not all those concerned with these issues believe in eliminating meat outright. Renowned food journalist Michael Pollan recently published *In Defense of Food: An Eater’s Manifesto*, popularizing the simple mantra “Eat food. Not too much. Mostly plants.” (Pollan 2008). Pollan argues for a higher dose of plants in the American diet for both environmental and health reasons.

To address these issues related to meat consumption, restaurants can provide more vegetarian options to their clients. Presenting menu items with a vegetarian icon or with a designated set of vegetarian listings can help customers to identify meat-less options.

Food Sourcing: Local Conditions

The food distribution industry nationwide is considered moderately concentrated, meaning the 50 largest companies hold 50 percent of the total market (Hoovers 2008). Allen Foods, a subsidiary of the US Food Service is the largest distributor in St Louis. As an indicator of how available environmentally minded food items might be for restaurants

in the area, the researcher contacted Allen Foods about their list of available products but unfortunately the company failed to respond to the request. Several organic grocers exist in the area, though none perform mass distribution. Therefore it is likely that restaurants are subject to the availability of products provided by large distributors or else must take the initiative to source these special ingredients independently. A new businesses sourcing local produce to restaurants called Eat Here St Louis is underway, fronted by Riddles owner Andy Ayers, but this project is still in its preliminary stages.

RESULTS

When seeking to study environmental decision making using a set of case studies there will inevitably be an enormous range of information. Up close each restaurant has its own story, its own unique history, and its own environmental approach. Yet by taking a few steps back, similarities can be seen on a broader scale. This next section discusses the motivators and management behaviors that characterize environmental performance in the restaurants examined for this study.

Corporate Restaurant Motivators

The large-scale restaurants chosen for this study all demonstrated some level of commitment to address environmental concerns. Two important questions are raised: why do they demonstrate this commitment, and how does the commitment turn into action? To pursue this inquiry, publically available documents were used as well as advertisements, in-store literature, and personal interviews. It was found that the largest motivating factors for restaurant chains to focus attention on their environmental performance were public image, stock holders, and firm foundations.

Public Image

Restaurant chains base their success upon the ability to brand their image and atmosphere. The establishment's name invokes a certain standard of food quality, service and ambiance. The image of a corporate restaurant in the eyes of their customers is therefore extraordinarily important. So it may not be surprising that public image plays a large role in motivating corporate restaurants to address environmental issues. Public pressure has driven many companies to take a closer look at environmental issues. And when a corporate restaurant takes an environmental action they want as many people as

possible to know. Analysts emphasize the critical importance of current “environmental demands on strategic planning, public relations, and advertising” (Sullivan 1992).

Because this study did not have the capacity to interview CEOs of these large companies, it may be impossible to know what they feel drives environmental responsibility at their firm, but the level of communication to customers makes it clear.

The investment in advertising speaks for itself. Preserving the environment may be one goal of taking action, but the fact that millions of dollars are spent each year to divulge these environmental projects to the public reveals that improved public image is more than just a side benefit. Chipotle uses billboard advertising to portray its food standards loud and clear. Slogans like “Honest Ingredients” and “Food with Integrity” are how Chipotle conveys its commitment to organic and local produce as well as ethically raised meats. “Get antibiotics from your doctor. Not your chicken.” reads another. In addition, Chipotle uses their drink cups as a beacon for educating customers about environmental issues; printing them with quick clever quips about their green building practices, refusal to use bovine growth hormone, and the importance of organic and locally grown produce. Within the newer “green” engineered stores, environmentally conscious building specifics are labeled in store. Chipotle is certainly not alone in promoting its environmental standards in the public sphere. Ben and Jerry’s also touts its environmental message on every pint they sell. In addition each scoop shop is littered with posters and an array of pamphlets for customers concerning all aspects of socially responsible business, environmental and otherwise. This effort no doubt intends to leave customers with the impression that eating Ben and Jerry’s is more than just delicious ice cream, it is also a step toward a better world. They use this public image to distinguish

themselves from other stores which might be merely all about the ice-cream. Starbucks, which has struggled a bit more with its environmental image, also uses in-store information to educate the public about its practices. Pamphlets are available with information on the company's environmental mission and their acts of social responsibility. Last fall Starbucks also introduced "GOOD Sheets" which provide weekly briefings of social issues, beginning with environmental information but now stretching far beyond. Special product campaigns such as Starbucks' introduction of the environmentally sustainable "Pike Place Roast" also draw environmental issues into the consumer mindset. These immense efforts by corporate restaurants through advertising, labeling, and high-profile product launches reveal just how crucial public image is in motivating environmental action. As Steve Lippman, vice president of social research at Boston-based Trillium Asset Management, explains "customers expect companies to act responsibly. In business terms, it's basic risk management. Customers...can turn against you if they don't like what they see." (Howard 2005). For corporate restaurants, public image is a powerful initiator of environmental thinking.

Stockholders

Unlike small businesses, corporate restaurants are not only responsible to their ownership but also to the thousands of stockholders who have invested in their company. This leaves many decisions open to scrutiny and suggestion beyond the direct leadership of the corporation. Stockholder input may be varied but it is powerful, particularly when addressing ethical concerns. Stockholders often push for increased transparency and bring up concerns over corporate social responsibility because, like the business owners themselves, they want the restaurant to have a successful public image.

How might we know that stockholders are interested in environmental changes? Stockholder reports are a key piece of evidence. Annually public companies issue a report to their stockholders that explains the overall performance of the corporation as well as any major changes in company practices. This document, though primarily financial, typically comes with an introductory letter by the CEO. In the most recently available reports, three of the four corporate restaurants investigated for this study included environmental information right in the cover letter. For Chipotle, organic and ethically-raised food issues took up one-third of the page (Ells 2007). Starbucks in its report mentions a commitment to purchase sustainably grown coffee, and build awareness about climate change (Schultz 2007). In fact, Starbucks actually issues two annual reports; one financial and one specifically on achieving goals of corporate social responsibility. This second report goes in depth to describe the goals, programs and results of efforts related to environmentally, socially and economically responsible behavior. The section devoted to environmental action relates achievements in energy reduction, plans to use sustainable building for new stores, reduction of non-recycled paper usage, and the environmental preservation of coffee growing areas. A great deal of effort has been put forth by Starbucks to ensure stockholders of their environmental stewardship.

Ben and Jerry's Ice Cream represents an interesting case. They no longer have a specific stockholder base since being purchased by Unilever in 2000. But in a television interview with Paula Gordon before the purchase took place, co-founder Jerry Greenfield discussed how stock holders pushed the company to become more activist and socially aware. Thus many stockholders were angered by the acquisition by Unilever, due

primarily to their history of poor environmental and social conduct in third world nations, a seemingly polar opposite to Ben and Jerry's high standard of social responsibility.

Unilever is a massive global food processing and personal product company, responsible for Skippy peanut butter, along with Dove soap and practically everything in between.

The corporation has over the years been accused of deforestation and toxic waste dumping in developing countries as well as a host of issues relating to racism, sexism, market domination and child labor violations (Corporate Watch 2001). Today, however, the company strives to boost its image of responsibility to stockholders. The opening page of the Unilever website reads (as of February 2009) "A Thirst for Sustainability" and explains the reforming of Lipton tea harvesting practices (Unilever 2009). Unilever, like Starbucks, also issues two reports to stockholders; one financial and one entitled "Sustainable Development". Thus despite Ben and Jerry's incorporation into this much larger company, there is still evidence that stock holders play a large role in encouraging environmentally conscious activity.

Firm Foundations

The grounding principles of a company profoundly influence how the business will perform with respect to the natural environment. Large restaurant chains all began with one single location, and the guiding principles of that first establishment strongly influence the actions of the extended corporate entity over time. Current business management experts widely recognize the power of a well established environmental mission (Hutchinson, Andrew and Frances Hutchinson 1996, Esty, Daniel C. and Andrew S. Winston 2006).

Both Ben and Jerry's and Chipotle were established with fundamental environmental values. The first ice cream scoop shop was created by renovating an old gas station in Burlington, Vermont using almost entirely recycled materials. The company prides itself on establishing its strong environmental ethic right from the start, especially when it comes to reducing waste. The first general manager instituted strict "say no to waste" policies, including banning sticky notes; all extra ice-cream was donated to nearby pig farms (Ben and Jerry's 2008a). According to a St Louis area manager for Ben and Jerry's, Michael, the original owners have "always been pro-Earth" (Michael 2009). As early as 1988, the company created an official company-wide environmental program addressing the use of plastics, cardboard, paper, eliminating hormones and treating wastewater in a lagoon system. The company has continually been concerned not only with its own environmental performance but also that of the surrounding community and the nation as a whole, actively resisting a nuclear power plant in New Hampshire and soliciting congress for higher fuel efficiency standards in 1991. Much of Ben and Jerry's subsequent cutting-edge environmental practices are attributed to that initial foundation of environmental responsibility. When asked how important addressing environmental issues at the restaurant was, area manager Michael replied "essential on the Vermont level" and "a high priority on the local level". This response indicates that environmental issues are prioritized by the top officials and the company founders more than by regional staff. Michael mentioned that when hiring new employees, managers are instructed to screen candidates for a history of environmental consciousness and philanthropy to ensure that they are in sync with "the original Ben and Jerry's philosophy" (Michael 2009). This further supports the statement that a

company's foundational assertions about environmental management deeply affect environmental actions down the line.

Chipotle, like Ben and Jerry's, was launched with a specific ethic entitled "Food with Integrity". Founder Steve Eells tells a very different story concerning this philosophy than Ben and Jerry. His drive to use organic and naturally raised ingredients arose from a search for superior taste. Eells explains "I never aimed to be an activist for family farms or sustainable agriculture, but I'm proud of the change we've helped to achieve. The vision I started out with at our first Chipotle has never dimmed" (Eells 2008). This last phrase is key. That the initial philosophy of ethical food sourcing continues today speaks powerfully to the impact of a founding philosophy. When asked what motivates environmental responsibility at the restaurant, the assistant manager for the Delmar Chipotle explained that environmental concerns are "essential to the company's mission" and mentioned that founder "Steve Eells is very passionate about doing the right thing." (Jennifer 2008). A corporate restaurant is grounded by the intentions in place at its origins and this foundation profoundly effects environmental considerations.

Starbucks and Panera Bread did not begin with a stated environmental ethic and thus have demonstrated a bit less consistency in enacting new standards. Starbucks founder Jerry Baldwin is quoted as stating in his initial meeting with entrepreneur Howard Schultz "we don't manage the business to maximize anything other than the quality of the coffee" (Thompson 1999). The company established in 1971 did not have any mention of environmental concerns until 1990 when Schultz created the first Starbucks six part mission statement. This initial mention of the environment, as point five of six, was not substantiated by any real action until 1997 when the company

established an Environmental Committee and a Green Team to address environmental issues. The outcome of these initiatives remains unclear until the first report on corporate social responsibility was published in 2001. For Starbucks the road to environmental stewardship has been bumpy, and this can be partially attributed to a lack of firm environmental foundations. It appears that Starbucks' environmental successes are often reactionary. In response to accusations of deforestation connected with coffee production, Starbucks partnered with Conservation International to preserve forested areas in developing nations. But even this effort has been challenged as Starbucks was also supposedly involved in a clear-cutting project in Indonesia (Burkhalter 2006). Environmental watchdogs keep a close eye on Starbucks. Even the trail-blazing initiative to create ten percent post-consumer-recycled paper cups for hot beverages did not impress many environmental advocates like Allen Hershkowitz of the National Resource Defense Fund who argued that "it's a helpful start, but 10 percent recycled content is minuscule"(Warner 2004). It was not until a veritable scandal about water waste in 2008 that the company took action to reform wasteful dip-well usage (Lorraine, Flynn 2008). Starbucks may be unfairly targeted due its symbolic quality as a tangible representation of globalization concerns, but regardless the lack of initial environmental commitment has left the company destined to a game of perpetual catch-up.

Panera Bread Company also displays a fairly weak commitment to environmental concerns, likely connected to a lack of a foundational environmental ethic. The company's mission is simple; "a loaf of bread in every arm" (Panera 2008), and puts a heavy priority on the quality of their artisan breads. The environmentally conscious actions that Panera has taken chiefly relate to food quality and health, such as their

featured organic kids meals. Panera also donates leftover breads to a local food pantry, but presents this as an act of “community” rather than waste reduction. In many ways Panera’s initial goals look much like Chipotle’s; providing the customer a superior quality product. It is interesting then that Chipotle has gone on to promote environmental stewardship by using sustainable building practices and local and organic food sourcing across the board where as Panera has not. Each corporate restaurant at some level rests upon the principles of its founder and Chipotle chose to start with “integrity” not simply “quality”. The difference is subtle but clear; founding philosophies shape environmental management.

Corporate Restaurant Environmental Management in Action

Having observed the instigators of environmental action in corporate restaurants, the next step was to uncover how environmental actions were carried out. Corporate restaurants displayed several trends when enacting environmental actions. First, corporate restaurants tended to focus on a single product as the cornerstone of their environmental marketing plan. Second, many companies partnered with or issued large donations to well-established environmental groups in order to address environmental concerns. Third, some corporations put significant effort into announcing environmental projects and much less energy into substantiating their claims thus introducing the problem of “greenwashing”. Fourth, corporate restaurants have invested in research and development critical to advancing environmentally-designed products.

Product Launch Strategy

Many environmentally-conscious actions remain behind the scenes. Changes in lighting, recycling procedures, water-efficient equipment might never be known to

consumers. Though these practices are all important, most corporate restaurants focus their environmental plan on a specific product. Ben and Jerry's is a perfect example of this environmental product campaigning strategy. The company often directly ties an environmental initiative to a particular flavor of ice cream, such as the "One Sweet Whirled" flavor supporting a campaign to fight global warming. This particular flavor featured the star-power of well-known music group Dave Matthews Band, a financial contribution to a global warming initiative by saveourevironment.org, and a campaign by Ben and Jerry's for consumers to pledge to reduce their carbon footprint (Volpini). The flavor was supported by a considerable publicity campaign and was a key feature available in every store until it was discontinued in 2005. Starbucks introduced the Pike Place Roast in 2008 to signify their move toward environmental and social sustainability. The brand bears a new mark signifying a relationship with Conservation International, and ensures the coffee meets the self-imposed C.A.F.E. (Coffee and Farmer Equity) ethical sourcing standards (Starbucks 2006). For Chipotle, the introduction of free range pork became the launching point of the "Food with Integrity" initiative. The "carnitas" menu item acted as the center-piece of a campaign to introduce more naturally raised meat. For Panera, the organic kid's meal was a small but pointed environmental initiative advertised in parents' magazines and on table stands in the restaurant (Reuters 2006). Corporate restaurants often use a specific menu item to highlight an environmental message.

It seems logical that the food industry would take a food-based approach to environmental action, although the food focus might not be the most environmentally efficient. In terms of quantifiable data, though no good statistics exist at this time, it is

possible that improved resource efficiency or better waste management could reduce environmental impact more than a switch to sustainably farmed coffee beans. Yet this type of action is not product-specific and thus receives less attention. This is not to say that restaurants do not attempt to achieve improvements in more subtle areas of environmental management such as energy reduction, but merely that products with environmentally-conscious qualities often take precedence due to their high public profile. As one analyst explains, firms are relying on promotional strategies because “industry’s responses to market demands are reactive and based on models of consumer behavior that were effective in a mass-consumerist society” (McCloskey, Smith & Graves 1993). In other words, people are believed to respond more positively to green products than to straightforward environmental information.

Partnerships with Environmental Organizations

An increasingly popular action for corporate restaurants has been to partner with a prominent environmental non-profit. These programs are positioned to offer mutual benefits. The restaurant receives the expertise and organization of a seasoned environmental advocacy group. The environmental group gains widespread publicity as well as additional revenue for its programs. Some institutions such as Greenpeace have refused to become involved in any such schemes for fear that it might take their focus away from environmental protection and toward corporate interests. Yet the vast majority of environmental organizations welcome the opportunity. This partnership process has been well documented by authors Stafford and Hartland in their article “Green Alliances; Strategic Relations between Businesses and Environmental Groups”. They describe green alliances as an opportunity for companies to obtain ecological expertise and also an

“active strategy that repels attacks from environmental groups and the government” (Stafford, Hartman 1996, p51). Environmental groups in turn receive funds and publicity. Yet the authors warn that this mutually beneficial scenario can turn sour if the two parties do not share the same ultimate goals. Such was the case of a certain “green” product endorsement in which the company involved was more concerned with obtaining an environmental label than ensuring the quality of its product. In other cases however, such as McDonalds collaborative effort with the Environmental Defense Fund to develop better waste management strategies, this type of relationship has proved extremely successful. Stafford and Hartland suggest that the need for clear objectives and collaboration rather than exchange remains essential to creating successful corporate-environmental partnerships (Stafford, Hartman 1996).

Green alliances have become common place in corporate environmental management. In 1997 Starbucks partnered with the Environmental Defense Fund to find a way to use more recycled content in hot beverage cups⁸. More recently Starbucks joined with Conservation International and Earth Watch Institute to ensure sustainable growing practices and the survival of rain forests in the developing nations where their coffee is produced. The Starbucks Foundation, a charitable branch of the corporation, has also funded environmental education efforts through the Earth Day Network (Starbucks). Ben and Jerry’s has become the poster child for corporate-non-profit alliances and displays an extensive history of environmental partners. Most recently the ice cream giant joined with Native Energy to offset carbon dioxide emissions with renewable energy and build a wind turbine. Prior to that, the company had worked with World Wild Life Fund and polar explorer Marc Cornellsen to extend education about climate change. Ben and

⁸ Discussed in detail in the “Research and Development” section on page 57.

Jerry's campaigned for customers to reduce their own carbon footprint through a partnership with SaveOurEnvironment.org, a coalition of 19 of the nations largest environmental interest groups. They have also tapped the resources of educational facilities, working with the Penn State Applied Research Laboratory to develop new hydrocarbon freezer technology and the University of Vermont's Center for Sustainable Agriculture to educate farmers about sustainable dairy production. Ben and Jerry's has also consistently aligned with organizations near their home base in Vermont to preserve the environment, such as to protect the Vermont's Lake Champlain Watershed (Ben and Jerry's 2008b).

By contrast, Chipotle has not thus far endeavored to partner with any environmental group. The company manages its environmental standards entirely independently and has opted to partner with specific farmers rather than any non-profit advocacy campaigns. This may be explained by the fact that Chipotle was not established with the same spirit of activism as Ben and Jerry's, nor has it suffered the intense scrutiny of a mega-chain like Starbucks. The company's current independence may change however if Chipotle continues to extend its goal of environmental sustainability further. A few hints of potential green alliances have sprung up as Chipotle seeks out new sustainable design methods and the possible use of biodegradable cutlery, but these partnerships would likely resemble contract labor or services rather than donations to environmental foundations. Panera Bread has in fact partnered with numerous community development non-profits, though none focused specifically on environmental issues. Panera utilizes non-profit partnerships with food banks, which reduces the quantity of food waste dramatically though the effort is intended to achieve

the ethical goal of reducing hunger. Though not universally utilized, partnerships with environmental organizations have played a large role in corporate environmental management, from product development to ethical sourcing standards to production and waste management.

The Problem of Greenwashing

Corporate restaurants are sometimes accused of unjustly reaping public relations benefits from unsubstantiated environmental projects, referred to commonly as “greenwashing.” According to the Greenwashing Index provided by EnviroMedia and the University of Oregon, greenwashing is “when a company or organization spends more time and money claiming to be ‘green’ through advertising and marketing than actually implementing business practices that minimize environmental impact” (EnviroMedia 2009). It is extremely difficult, however, to get accurate information on the cost of publicity for environmental campaigns as compared to the cost of the projects themselves. Therefore most accusations of greenwashing are based on this perceived imbalance rather than hard data. Many criticize the use of self-defined standards for using the words “sustainable”, “natural” or “ethical” in major restaurant chains. Chipotle for example, claims that their pigs are raised in an “ecologically sustainable way”. For Chipotle this means vegetarian feed, open pastures, no antibiotics and lower food miles. But environmental activists have challenged this definition, noting that the high inputs of petroleum-based energy and water in pig raising are by no means “ecologically sustainable” (McWilliams 2008). Starbucks has also created its own standards for “ethical” sourcing of its coffee under a program called C.A.F.E. (Coffee and Farmer Equity), but refuses to use the international standards for “fair trade”. They do carry one

strain of official “fair trade” coffee but it is not used as their functioning ethical sourcing standard and is often unavailable in stores. One might only assume that Starbucks’ standards are less stringent and perhaps not worthy of the notions of equity they proclaim. Another common critique comes when corporations proclaim an environmentally sustainable action without mentioning that it only applies to a certain percentage of stores or products. For example, Chipotle expresses its initiative to use organic black and pinto beans when in fact only about twenty five percent of beans are certified organic (Chipotle 2008). This type of fumbling with numbers can be seen as misleading to consumers and thus a manipulation of customers attracted to notions of environmental sensibility.

Corporate restaurants walk a fine line between appearing environmentally sensitive and coming off as merely environmentally-exploitative advertisers. One Panera franchisee explained after a move towards naturally-raised chicken and organic kid’s meals, “We sometimes say we feel like we have a big target on our back when we do these things” (Richgels 2006). Even Ben and Jerry’s was given a harsh look after a self-audit released to the public suggested their ambitious agendas may have outweighed their performance (Hoffman 2000). Overall, assessors of greenwashing call for honesty in advertising and transparency in practice. Straight-forward advertising and complete transparency may be unattainable ideals in the business world, but the notion of greenwashing introduces a healthy dose of skepticism to environmental claims.

Research and Development

Occasionally corporate restaurants have the resources and drive to take on large projects for the research and development of new environmentally-friendly products.

Though these instances may be few and far between, the industry as a whole benefits substantially from these efforts. Environmental business experts see increasing benefits to this approach described as the “eco-advantage” which gives companies the strategic advantages of staying ahead of competitors by improving efficiency and lowering risks (Esty, Daniel C. and Andrew S. Winston 2006). Starbucks and Ben and Jerry’s represent two key examples. The Starbucks Paper Project was a joint venture between Starbucks, the Environmental Defense Fund (EDF), Solo Cup Company, Mississippi River Corporation and Mead Westvaco starting in 1997 to find better solutions to the use of paper cups in their coffee shops. After introducing the cup-sleeve as an alternative to double-cupping hot beverages, the program began seeking to raise the percentage of recycled content in the cups. According to the EDF, at that point in time recycled material had never been in direct contact with food, especially hot beverages. Recycled paper suppliers for Starbucks had to develop and conduct new testing procedures for the cups which contain ten percent post-consumer recycled content. The FDA approved the cups in 2004 and after additional testing they were distributed to all Starbucks locations in 2006 (Environmental Defense Fund). The improved cups were nearly ten years in the making. "This is an important move for Starbucks, and it also clears the way for other companies to do the same thing—a move that will add up to even bigger environmental benefits over time," said project manager Vitoria Mills (Environmental Defense Fund). Though ten percent recycled content might seem small, the impact goes far beyond the quantifiable trees, water, energy and waste saved by Starbucks. The Paper Project cups were an industry first described as “ground breaking” and commended for “giv(ing) other companies a clear path to follow” (Business Wire). The company put forth development

and testing costs up front that benefit all other restaurants that use this technology down the line.

Similarly, Ben and Jerry's Ice Cream is currently seeking to pave the way in freezer technology. Standard freezers in use today leak a small amount of hydrofluorocarbon gases each year which contribute to ozone depletion as well as climate change. The proposed alternative to this damaging gas is hydrocarbon technology using purified propane. Because propane is extremely flammable, the new freezers must be rigorously tested for safety standards. In addition, the technology must be approved by the Environmental Protection Agency's Significant New Alternatives Policy. Ben and Jerry's is currently supporting a trial for the freezers while EPA approval is being processed (Ben and Jerry's 2008b). The company prides itself on being the first company to test hydrocarbon freezer technology in the United States. Though the results of these efforts have yet to be seen, it is likely that this technology once established will have an important impact in the food industry.

Small Restaurant Motivators

The incentives for small restaurants to address environmental issues differ substantially from those of their corporate peers. Unlike with corporations, little scholarly literature is available concerning the environmental practices of small businesses. In this study, personal interviews with store owners revealed the largest influencing factors for environmental decision making to be an internal environmental ethic, a sense of personal identification with principles of environmentalism amongst the ownership, and the aspirations toward a new environmental paradigm.

Internal Environmental Ethic

The most surprising result of this study was the observation of a strong internal environmental ethic present in smaller restaurants. Every single restaurateur interviewed cited personal satisfaction and a sense of responsibility as the chief instigators of environmental action. All restaurateurs interviewed - except one - stated that public relations played absolutely no role in motivating environmental actions. Many owners in fact felt strongly opposed to displaying their environmental efforts to the public. None of the restaurants had a statement addressing environmental issues, nor did they provide any information about environmental efforts to customers beyond a few specialized menu item descriptions. The owner of Blueberry Hill, Joe Edwards, was particularly put-off by restaurants who intended to profit from their motions toward environmental sustainability. Edwards did not want his establishment to seem “holier than thou” and was very modest about his restaurant’s environmental efforts. He saw environmental publicity as “unnecessary” and even “ostentatious” at times, ultimately detracting from the real purpose of taking environmental action. According to Edwards “all else is side

benefits” (Edwards 2008). Patrick Liberto from Meshuggah Café also advocated environmental action without the frills of publicity. Businesses should “just do it”, he said, and take environmental action “for its own sake”. He asserted that too much promotion “cheapens” the idea of environmental stewardship (Liberto 2008). A co-owner of Booster’s Café explained that “it is our responsibility” rather than a strategic move to consider the environment (Harrington 2008). Even one restaurant which took little to no environmental actions stated that the business would be much more concerned with internal efficiency than with placing its environmental consciousness in the public eye (Anonymous 2008). Public image and customer concerns were widely disregarded as inconsequential in motivating environmental decisions. Instead, concern for environmental issues was repeatedly connected to a sense of ethical responsibility within the restaurant itself.

In one case, however, the owner of Riddles Penultimate Café and Wine Bar assertively recognized the public relations benefits of taking environmental action. Owner Andy Ayers proclaimed there to be “enormous marketing advantages to doing the right thing” (Ayers 2008). Even so, Ayers mention this as an after thought to the discussion of his restaurants’ emphasis on local foods. He recalled how local foods were being served for some time before it was suggested that he include this information on the menu for customers to see. After noting positive customer responses to the detailed menu he concluded that this type of environmental action had a positive impact on public relations, not the other way around. Despite his enthusiasm for displaying environmental information to consumers, this factor had not been a major influence on instigating changes in the restaurant. Overall, small restaurants were not significantly motivated by

public relations benefits of environmental action and instead emphasized an environmental ethic internal to the institution.

Personal Identity and Environmentalism

Another striking element arising from this study was the extent to which restaurant owners identified personally with the environmental actions of their restaurant. On three separate instances, restaurant owners explained that they do not typically take time to hold an interview for a research project but in this particular case the topic of environmental decision making “struck a chord” with them (Edwards 2008, Anonymous 2008, Ayers 2008). The repeated appearance of this phrase, striking a chord, indicates the deep sense of personal resonance that these issues hold. Every single small restaurant owner pegged their own personal ethical motivation as the greatest instigating factor in making environmental changes. Patrick Liberto from Meshuggah Café expressed his understanding of his job as an “extension of a personal way of life”. For him, the environmental management of the restaurant springs directly from his personal choices to take on environmental thinking as a lifestyle. Being introduced to the question of environment decision making he claims “begs the question ‘what kind of person are you?’” (Liberto 2008). This type of question establishes a strong connection between the personal identity of a restaurant owner and the environmental choices of his/her business. Andy Ayers from Riddles explained his passion for acquiring local foods in a similarly personal light. For him, buying quality food is a deeply individual process as he relishes in establishing personal connections with the farmers where he makes his purchases (Ayers 2008). His choice to use ethically raised meats and more environmentally sound produce stems directly from personal experiences in the food industry over the course of

his lifetime, long before Riddles was ever in existence. In the same vein, the ownership of Booster's Café attributes much of the incentive for environmental action to their identity as philanthropists. The restaurant was established by former development workers in Africa and the personal connection with concepts of global citizenship show through in their environmental sensitivity. When asked about limiting water usage in the restaurant co-owner Barb Harrington explained her motivations by recalling a past experience in which she walked two days for water in a village in Africa. The perspective provided by personal experience heavily impacts notions of environmental consciousness. Taking environmental action Harrington explained "would make (her) feel more at peace with (her)self" (Harrington 2008). Personal identification with restaurant practices profoundly motivates environmental action. When asked about motivations for environmental change, Joe Edwards of Blueberry Hill declared simply that "personally, waste bugs me" (Edwards 2008) and went on to explain how he chooses to reduce waste in his own life. Individual lifestyle choices strongly affect business practice. Almost all restaurant owners described themselves as "environmentalist". This self-description was held up, directly and indirectly, as a major influence on environmental decision making.

Advocating a New Environmental Paradigm

Small restaurants also universally mentioned the need for a new wave of environmental thinking. One restaurant owner interviewed explained its lack of environmental action by virtue of the fact that there was not enough "industry consciousness" (Anonymous 2008). He indicated that there would need to be significant change in the mode of thinking in restaurants in order for environmental actions to be taken. Liberto from Meshuggah's described the need for a "change in mind-set" using the

automobile analogy of changing from “automatic to stick-shift” (Liberto 2008). He views the imminent need for a shift toward taking control of environmental impacts rather than cruising along with the minimal effort of the status quo. Liberto challenges other businesses to alter their thinking in approaching environmental issues asking “if a small place like us can (take the environment into consideration), why not others?” (Liberto 2008). The co-owner of Boosters also mentioned how environmental action requires “changes in consciousness” on the part of employees and management as well as customers. She explained that the restaurant, though not exceedingly environmentally active, advocates environmental responsibility through “attitudes and conversation”, emphasizing the importance of engaging with people’s ideas about the environment as crucial to environmental management on a broad scale (Harrington 2008). The emphasis on changing modes of thought was pervasive among small restaurants. Riddles owner Andy Ayers suggested that establishing an environmental agenda demands a “shift in expectations” (Ayers 2008). Reinforcing the need for a change of mind-set, Joe Edwards asserted that others must come to understand that “we’re all on this earth for a short time” and that “mankind is the most imperfect animal” (Edwards 2008). Edwards indicates a need for a change in society’s understanding of the position of humans within the natural environment. All of the above comments reflect a desire to change the current business paradigm surrounding environmental issues. Small restaurant owners advocate a new societal model in which individuals and businesses take proactive approaches to environmental concerns.

Small Restaurant Environmental Management in Action

The behavior of individual restaurants in reducing environmental impacts varies greatly, but this study revealed several trends in taking actions toward sustainability. Small restaurants tended to make opportunistic changes, to become easily frustrated by failure, and to find unique situational solutions.

Opportunistic Changes

When confronted with environmental concerns, small restaurants tend to make changes gradually as opportunities arise. Though many restaurants intended to take environmental action, these deeds did not typically take place until a relevant occasion was presented. For example, one restaurant did not consider changing to compact fluorescent light bulbs until a salesman arrived and proposed the purchase to the management. Once the product was made easily accessible, the owners made the switch with minimal effort (Anonymous 2008). Similarly at Riddles, the management was inspired to make changes after being approached by a non-toxic cleaning supply company at a local “green” exposition (Ayers 2008). First hand personal contact with environmentally-minded products seems to open up an opportunity for improving a restaurant’s environmental management. In certain cases an employee might also introduce a change to be considered by managers. At Boosters Café, a former employee volunteered to transport recyclables to the processing center. While he worked there, the café consistently sorted recyclables. Once he left, however, they returned to previous habits of generalized disposal (Harrington 2008). Other opportunities might be presented by neighboring businesses. Meshuggah Café for instance partners with next-door neighbor Missouri Coalition for the Environment in order to recycle their paper products.

Though it is possible that Meshuggah might have recycled paper regardless, the convenience of a nearby environmental group proposing combined recycling prompted more immediate action (Liberto 2008). Many environmentally conscious adjustments also come when renovations need to be made. Blueberry Hill recently required a roof replacement and opted for reflective roofing which retains less heat in summer in order to improve energy efficiency. The restaurant also refurbished their darts room and took this opportunity to replace conventional light fixtures with compact fluorescents (Edwards 2008). Most environmental actions are prompted by outside forces or other related needs. This is not to suggest that environmental action is merely taken when convenient, many of these actions require a significant commitment of effort and resources, but rather explains that convenience and exposure often create the opportunity for change to occur. Though rooted in a strong environmental ethic, small restaurants rarely seek to actively enforce a broad set of environmental changes but rather make singular environmentally conscious choices as they arise.

One Strike Recycling

In discussing the process of environmental decision making with restaurant owners it was common to come across a situation in which a single unsuccessful experience colored future environmental efforts. When one effort for environmental improvement fails the disappointment typically ends the progress of that initiative. The concept became remarkably prevalent when it came to addressing recycling. Riddles' management had for several years made efforts to recycle until it was perceived that the municipal waste management pick-up was not respecting their intentions and simply dumping all refuse into the same garbage truck. Rather than attempting another avenue

for arranging recycling such as delivering the recyclables to the local plant or coordinating with other nearby businesses for private pick-up, the frustrated restaurant just gave up (Ayers 2008). Another restaurant explained that the management had attempted for a period of time to institute recycling, but employees were resistant to taking the extra time to sort waste so they ended the recycling effort (Anonymous 2008). As mentioned in the previous section, when a Booster's employee ceased to take on the responsibility of recycling himself the café simply stopped (Harrington 2008). At Blueberry Hill glass bottles were recycled in the basement until neighbors complained about the noise of the bottle dumping. Though serious about recycling, the management eventually decided it was not worth losing the respect of neighbors (Edwards 2008). In all of these situations an alternative strategy could have been implemented, but most restaurant owners did not seem to consider any other options once the original initiative had failed. One might argue that alternatives might have been more costly, but this was not necessarily true, and the block appeared to be chiefly psychological. After a single failed effort recycling was seen as a lost cause.

This resignation of recycling efforts did not, however, seem to affect other environmentally conscious action. A failure to recycle, for instance, did not imply that a restaurant would therefore give up on energy efficiency efforts, or reducing natural resource usage and food waste. This "one strike" phenomenon might potentially apply to other attempts at environmental action but there was little information available simply because no restaurants reported significant failure in other areas of environmental management. Either no initiative had been taken, and thus no opportunity for failure

presented, or the initial actions taken were successful and therefore no “strikes” had yet occurred.

Unique Solutions

Small restaurants are prone to find unique tactics for confronting environmental concerns. These distinctive actions result from the fact that small restaurants have only one single location to manage and thus have the flexibility to find environmental actions that suit particular needs and local circumstances. One demonstrative example can be found in Riddles’ approach to paper waste. Due to their constantly changing selection, the restaurant must print new menus each day and goes through a great deal of paper in the process. Rather than merely seeking to recycle the paper, the management has developed a relationship to facilitate direct reuse; old menus are donated to a local daycare center to be used by the children (Ayers 2008). The paper can still be recycled after that. The flexibility of a seasonal menu also allows Riddles to maximize local and organic purchases in a way that might not be possible if there were multiple wide-spread locations. In addition, having only one location requires a limited degree of uniformity of appearance. Riddles, Meshuggah, and Blueberry Hill all mentioned taking advantage of recycled furniture in their restaurants (Edwards 2008, Liberto 2008, and Ayers 2008). This furniture was salvaged from local sources and would have been difficult to coordinate had the owners not been familiar with specific stores going out of business. Small restaurants also seem more capable of going against potentially wasteful industry standards. In lieu of recycling glass, some restaurants have simply refused to sell bottled beverages (Edwards 2008). One establishment mentioned eliminating disposable napkins in to-go orders as a way to cut down on excess paper use (Anonymous 2008) and another

abolished all plastic ware (Edwards 2008). The kitchen manager at Blueberry Hill tried to find multi-use ingredients and “cross-pollinate” the menu to cut down on food waste (Edwards 2008). Small restaurants also tend to be open fewer hours, closing in between meal times, which can save on energy costs. As Joe Edwards described it, “we are always looking for new ways” to improve environmental performance. Because small restaurants take environmental actions on a case-by-case basis, they offer unique solutions to addressing environmental concerns.

ANALYSIS

The original research question posed the question: how do large corporate restaurants and small locally-owned restaurants respond to environmental concerns? And by extension, which is more efficient at achieving environmental changes? As it turns out, there is no clean cut answer to this question. Corporate institutions and local businesses each have their advantages and disadvantages in confronting environmental challenges. This section highlights the similarities between these two forms of the food industry and then proceeds to underline the key differences between them.

Similarities

The restaurants in this study revealed striking similarities, indicating industry-wide trends in environmental decision making. The restaurants all took on incremental changes to improve environmental performance, acted primarily on socially salient issues, and experienced many of the same basic obstacles.

Incremental Changes

Restaurants large and small took a gradual approach towards reducing their environmental impacts. Corporate restaurants demonstrated this by establishing goals and then slowly phasing them in. Typically corporations would introduce a new product or practice to a few restaurants before extending it to all stores. Starbucks has demonstrated this with its initial trial use of partially recycled cups as well as with its general recycling and energy efficiency efforts. Chipotle similarly has only introduced recycling and the use of bio-cutlery to select locations (so far only in California), with aspirations of extending these elements. Organic produce and naturally raised meats were also added to the Chipotle menu incrementally, starting with a modest percentage and eventually

raising this proportion over time. Ben and Jerry's by contrast has occasionally instigated abrupt changes such as the elimination of bovine growth hormone in their milk. But overall their introduction of unbleached paper packaging and recycling initiatives took gradual steps over an extended period of time before achieving an ultimate goal. Overall this incremental process of creating environmental change seems to be a sound business practice, allowing the company to conduct a trial run and fine tune its product or process before making the action universal.

Small restaurants also took steps toward environmental action. Though small restaurants tended to make changes more sporadically than systematically, the end result did not differ widely from that of their larger counterparts. Rather than having a single set of goals introduced incrementally over time, smaller businesses would add new facets of environmental action as the occasion and opportunity arose. Despite the difference in formality both sectors demonstrated incremental approaches to reducing environmental impacts.

Issue Salience

One unexpected aspect of this study was discovering that certain environmental issues appeared to be much more prominent in the mindset of restaurant owners than others. These trends ran across the board and proved to be more correlated with public salience than with potential for reducing environmental impact. It was striking to find that every restaurant but one declared food origins to be their chief environmental concern. This may be linked to concerns about taste and health as well, but it was interesting to note that this issue took precedence over others. As explained in section three of this paper, issues surrounding food are highly complex and environmental impacts are often

uncertain. Ambiguities in the term organic, disputed advantages of buying local, and the complicated definitions of natural livestock raising make food one of the least direct ways for a restaurant to address its environmental impact. It is very likely that this concern over food sourcing has been heavily influenced by the recent attention from popular media. For example, in January of 2009 it made national news that the president-elect's daughters would receive organic school lunches (Shipman 2009). A petition has even begun, arguing that an acre of the white house lawn should be plowed in order to demonstrate sustainable food origins. Food journalist Michael Pollan's book The Omnivore's Dilemma has been on the New York Times best sellers list for 74 weeks straight. The back-to-basics how-to food memoir Animal, Vegetable, Miracle by Barbara Kingsolver has also achieved wide commercial success (New York Times 2009). Despite a financial crisis in America drawing customers away from specialty items, Whole Foods Natural Grocer's performance which had rapidly declined has recently outdone analyst expectations, and as of February 19, 2009 their stock is on the rise signaling a renewed faith in the industry by jumping 37 percent in a single day (The Associated Press 2009). It is obvious that environmentally friendly food has taken on a significant role in the public consciousness. Trailing behind enthusiasm for improved food sourcing, restaurants uniformly mentioned reduced energy consumption as their next big priority. Energy usage, which can contribute to global warming, has also been a force in politics and popular media over the last few years. Today it is impossible to watch an hour of television without an advertisement mentioning energy efficiency or green technology. Renewable energy initiatives have been prevalent on both state and national political agendas. In addition to worries about greenhouse gases, the emphasis on seeking out

alternatives to fossil fuels has been framed as an issue of national security. The suggestion that American foreign affairs, such as the war in Iraq, have been fueled by oil interests makes this issue particularly hard-hitting. It became apparent in this study that the concern for reduced energy usage was profoundly affected by its wider public salience.

By contrast, some issues regarded by experts as absolutely crucial seemed to have no salience at all. Most notably, all restaurant owners appeared perplexed by the connection between vegetarianism and environmental protection. When asked if they had considered including more plant-based foods or vegetarian options on the menu, the answer was a resounding “no”. They replied that this had never even been considered. The fact that the UN had declared livestock to be “one of the most significant contributors to today's most serious environmental problems,” (Matthews 2006) could not have seemed more distant to these business managers. This lack of attention to the environmental degradation caused by meat production may be influenced by the heavy cultural importance of meat in American culture, particularly in the Mid West⁹. There is also a tendency to regard vegetarian options as catering to a particular demographic of those who abstain from meat entirely, rather than considering meatless options as a potential choice for any consumer. Overall the prioritizing of particular environmental issues was uniform across the restaurant industry and appears closely linked to salience of these concerns in the public sphere.

Shared Obstacles

⁹ See Gossard and York “Social Structural Influences on Meat Consumption” *Human Ecology Review*, Vol. 10, No. 1, 2003.

Another commonality among restaurants in this study was the explanation of underlying obstacles. Property ownership, employee compliance, and cost were the three hindrances to environmental improvements which were threaded through nearly every discussion. Many environmental initiatives call for structural changes such as building maintenance, new heating and cooling equipment, or altering water systems. None of the restaurants in this study owned the space they occupied, and typically these larger changes had to be negotiated with a landlord. Most locations had a limited lease and owners expressed fears that they would invest in making the property more environmentally efficient only to lose the space a few years down the road. This level of uncertainty frequently prevented action from being taken. In addition, several restaurants explained that landlords were uninterested or hostile towards efforts to change structural elements of the building. For this reason, the majority of environmental actions taken were non-structural despite the fact that improving building efficiency can dramatically affect energy usage.

A second problem universally encountered by restaurants was employee compliance. Managing waste and reducing water usage in particular are heavily dependent on staff behaviors. Teaching employees to follow environmental procedures in the kitchen and dining room takes significant effort, and ensuring that they then comply with these suggestions can be difficult. This problem with employee performance is compounded by the fact that the restaurant industry has a high turn-over rate; thus monitoring the environmental practices of a constant influx of new staff can be cumbersome. Finally, every restaurant mentioned that cost played at least some role in influencing environmental decision making. Besides the cost-saving measures of energy

and water reduction, most environmental actions carry a higher price tag. Though certain successful businesses purported to take cost lightly when addressing serious environmental concerns, they continued to be deterred by the high cost of high-tech solutions. Some indicated that they were waiting for prices to drop (as is usually the case with new technology) and for more efficient machinery to be developed. In the end, these restaurants need to turn a profit and there is always a limit to the financial resources available for environmental action. In conclusion, restaurants both corporate and locally-owned experienced obstacles of property ownership, employee compliance and cost in bringing their environmental goals to fruition.

Key Differences

Yet despite these similarities, corporate and local restaurants' environmental decision making functions differently in several fundamental ways. The two types of food service have differing motivational influences as well as unique approaches to environmental action.

Motivations

The motivations for environmental action in corporate and locally-owned businesses diverge drastically. Corporations experience a wide range of interests coming from a place in the public spotlight, financially invested stockholders, and the intentions of the company itself. Though these interested parties might all place pressure on the corporation to address environmental issues they are incredibly scattered and diffuse. Public media attention does not take on uniform opinions, nor do stock holders. And it is probable that the internal ideals about environmental protection within such a large institution are variable. Thus a corporation is motivated to confront environmental

impacts by a range of diverse sources, juggling numerous view points, and incentivized to develop a variety of solutions. A small locally-owned restaurant however is almost exclusively motivated by the ownership. The impulse to create environmentally-minded changes is a personal one. This means that small restaurants are not held responsible to outside parties in the same manner as corporations. Yet the deep environmental ethic and personal commitment of these owners may indicate that environmental stewardship will be a long-lasting policy. Where the wide-ranging and fluctuating interests of media and stockholders are known for being fickle and environmental issues risk becoming short-lived trends, smaller businesses will likely hold on to these values long into the future. Thus each side has its advantages and disadvantages. On the one hand large corporate restaurants are held accountable by external forces, creating a forceful motivation for environmental responsibility. But on the other hand small restaurants motivated by the personal identity and ethics of the ownership may be more likely to follow through on environmental decisions over the long-term.

Actions

Restaurants large and small differ in three major aspects of environmental action; publicity, project enactment, and innovation.

1. Publicity

Large corporate restaurants typically make a big splash about environmental initiatives. Through high-profile product launches, alliances with major environmental organizations, and an array of publically available information, these businesses make no secret of their environmental goals. Locally-owned restaurants on the contrary prefer to maintain a discreet idealism. Small restaurants do not seek to impact their public relations

by advertising environmental projects. Both approaches carry benefits and potential pitfalls. The publicity of large scale restaurants can raise environmental awareness in the public sphere, educating consumers and shifting expectations toward a more environmentally sound food industry. Yet the money poured into promoting environmental initiatives can create a greenwashing effect, reducing the funds available for actually addressing the issues and undermining the credibility of these projects. On the flip side, smaller restaurants that put no resources into advertising their environmental efforts lose the educational element inherent in these programs and the potential attraction of customers but gain the advantages of concentrating their resources on reducing their environmental impacts.

2. Project Enactment

Corporate and locally-owned restaurants go about enacting environmental projects with two distinct styles. Corporations approach environmental issues with goal oriented perseverance. A company addresses an environmental problem by setting explicit goals to be achieved, sometimes within the context of a clearly defined environmental management system. Regardless of the plan's success, the ultimate emphasis is on eventually achieving this specific standard of performance. These objectives are rarely tossed aside when obstacles occur but rather adjusted or reformed so that sooner or later a solution will be found. Small restaurants however take an opposite approach, typically with unspecified goals and opportunistic action. Locally-owned establishments do not make clearly defined environmental agendas, nor do they aggressively advance environmental initiatives. These small businesses most often take opportunities as they come and implement environmental projects when convenient.

Though large corporations benefit from the discipline and rigidity of a goal-oriented approach, this can be considered wasteful if time and money are expended on goals that are not well thought out and achievable. On the other side, small businesses benefit from having no resources wasted on implementing strict environmental agendas but may suffer from inconsistency and more frequent resignation.

3. Innovation

The type of innovation occurring at large-scale chain restaurants and within small local eateries differs greatly. Corporate restaurants can fundamentally change the supply chain through research and development. By investing in the creation of recycled and recyclable packaging, low-energy storage, and other resource-efficient technology, big businesses can exert a great deal of control over the products they purchase. Small businesses by contrast have no control over the availability of eco-friendly products and are typically limited to pre-existing industry standards. In addition, the improved products created by large-scale research and development then become available to smaller restaurants and benefit the industry as a whole. And yet smaller restaurants have their own form of innovation. Because locally-owned restaurants are singular and locally adapted they act as laboratories for developing new environmental approaches. Without the pressure of making a change that will affect hundreds of restaurants nation-wide, these businesses can create unique low-cost solutions (with examples mentioned in the previous section). These fresh ideas can potentially be adopted by other businesses. Both large scale and small scale restaurants contribute to innovations in environmental management with regard to their respective resources and context.

CONCLUSION

The food service business is gradually adapting to the new expectations of an increasingly environmentally-conscious culture. Restaurants prove to be a fascinating industry when considering environmental issues. Neither national chains nor local eateries can be championed as the premier environmental stewards of the industry. This study suggests taking a critical but appreciative look at corporate initiatives to address environmental concerns. For corporations the risk of greenwashing is ever present, yet the potential for creating strong environmental plans and altering the supply chain can be dramatically beneficial. At the other end of the spectrum, this research sends a clear message not to underestimate the potential of small businesses to take environmental issues seriously. It has been proven here that though small restaurants may lack the focused resources of their corporate counterparts, they can carry an enduring environmental ethic, be strong advocates of altering industry perspectives, and act as laboratories for new forms of environmental management. Thus both ends of the spectrum display weaknesses as well as strengths.

The research question asking which type of restaurant is more effective at achieving environmental change turns out to be much more complex than anticipated. Yet this complexity, though seemingly indeterminate, can also be very informative. This study has distinguished the key contrasts between corporate and local restaurant strategies as the consideration of public image, the methods for achieving goals, and the processes of developing new ideas. Examining these institutions' differing styles of environmental decision making leads to several important questions. What degree of publicity is ideal for an environmental initiative? How do different methods of enacting

environmental actions (strategized or opportunistic) affect how we encourage businesses to make environmentally-minded changes? How can society best support the development of new ideas, both through formalized research and situational experimentation? A more quantitative approach might also be utilized in further study to find specific data on a particular issue, for example to thoroughly examine differences in percentages of recycling between large and small businesses. This more specialized research could use direct surveys to gather numerical data. These are all important issues to be addressed in future research.

So where do we go from here? Knowing the relative incentives and strategies for environmental action of corporate and locally-owned restaurants, what suggestions can be made for the future of the industry? First, the shared obstacles across the industry must be addressed. The reluctance of property owners to make environmental changes proved to be a pervasive obstacle. In light of this discovery, it might be useful to consider creating more incentives for property owners to invest in the energy and resource efficiency of their property. Few property owners are aware that partial federal tax deductions of up to \$.60 per square foot are available for "green" measures affecting any one of three building systems: the building envelope, lighting, or heating and cooling systems (National Restaurant Association 2009). This financial incentive could be increased and more widely publicized. Another approach might be providing publically subsidizing energy audits to give a boost to property owners skeptical of investing in energy efficiency improvements. The persistent problem of restaurant employee compliance could also be addressed in many ways. Educating staff about the importance of environmentally-conscious conduct can be one crucial element. A rewards system for

improved environmental performance might be another option. Restaurant owners could also establish environmental practices as critical job requirements, and institute non-compliance as grounds for firing. Though this might seem too strong a stance, in an industry with such high turn over where details like physical appearance, regular hand washing, and small chores are commonly understood job imperatives, incorporating environmental practice as a behavioral standard does not seem too far fetched. With respect to the universal obstacle of cost, recommendations for action are less certain. Economic incentives for high-cost investments such as purchasing high-efficiency technology exist already and could be enhanced. Currently most incentives focus on reducing the cost of a *product* but reducing the cost of a *service* such as recycling and compost pick-up might also prove useful. For example, restaurants might be taxed on the quantity of their unusable waste output. These suggestions represent just a few initial ideas for confronting the issues of property ownership, employee compliance, and cost in environmental decision making in the restaurant industry and many more solutions are on the horizon.

In addition, the researcher suggests that increased environmental education and consultation could ease many of the difficulties in environmental decision making. Restaurants in this study both large and small portrayed a limited knowledge of the vast array of environmental impacts posed by their business. Their attention often focused in on certain elements of environmental management and ignored others, typically correlating more with the salience of an issue rather than the magnitude of its environmental benefit. This was paired with a minimal understanding of the breadth of potential solutions for confronting these problems. The need for accessible information

about environmental issues and management strategies is profound. This knowledge has been publically available on the internet¹⁰ for some time but has yet to be widely distributed throughout the industry. This may be changing thanks to education efforts by the National Restaurant Association and state-level conferences such as the recent “Going Green! Improving your Restaurant's Environmental Practices” conference put on by the Colorado Restaurant Association. Environmental guidebooks for restaurants are also available for purchase at a very low cost, such as that provided by the Green Restaurant Association. Additionally, consumers can play a role in increasing environmental literacy by letting restaurants know that environmental issues are important to them, both in their words and actions.

Yet the environmental field is changing so rapidly that it would be nearly impossible for business owners to keep pace with all of the new information and technology. Consulting experts could potentially acts as an extremely efficient tool. Environmental consultants provide specialized knowledge, up-to-date technical information, and a support system for addressing problems throughout the process of reform. In addition, the objective perspective of a third party environmental expert might reduce potential for greenwashing. In the United States the pre-eminent resource for restaurant consulting is the Green Restaurant Association. Consulting typically begins with a thorough onsite consultation (usually requiring about three hours of observation but only 1 hour of a manager’s time), followed by a set of recommendations, a schedule for implementation, and follow-ups to address any problems. The GRA and other similar organizations establish minimum standards for environmental conduct and then provide a variety of options for increasing standards incrementally over time. Certification

¹⁰ See appendix pages 97-99 for a list of useful websites.

programs are another potential option for restaurants seeking guidance in improving environmental performance, offering similar informational benefits to consulting but with less hands-on individual attention and no direct cost to the restaurant. Green Seal, an environmental non-profit working to promote environmentally sound products and services, is in the process of finalizing a set of standards for the food service industry. Certification standards, like consulting programs, also require increased environmental commitments each year, ensuring the continual progress of environmental management at the restaurant. Third party solutions such as consulting and certification help to reduce greenwashing, informational barriers, and inefficiency of action, essentially shifting the burden of environmental decision making from restaurant owners to those with specialized expertise. Consulting and certification specifically designed for restaurants has only just recently developed and thus has yet to become widely adopted. Restaurants in this study however demonstrated a keen interest in obtaining outside expertise and these resources may potentially gain popularity as they become more available and well-established.

Restaurants are only beginning to tap the resources available for addressing environmental issues. Hopefully environmental decision making in the industry will become more comprehensive, better informed, and more effective as efforts to reform the industry continue. Environmental changes are gaining momentum across all industries and it seems these concerns will remain on the agenda even in a time of economic decline. These changes do not emerge unconsciously but are the result of particular decisions at specific times made by distinct individuals. By understanding how these decisions are made, we can work to improve the process of environmental management

and help businesses to efficiently address these pressing social, economic, and biological concerns.

BIBLIOGRAPHY

- Anonymous 2008, *Interview*, Unnamed Restaurant, St Louis, MO.
- Ayers, A. 2008, *Interview*, Riddles Penultimate Cafe and Wine Bar, St Louis, MO.
- Bell, Simon and Stephen Morse 1999, *Sustainability Indicators: Measuring the Immeasurable*, 1st edn, Earthscan, London.
- Ben and Jerry's 2008, , *Ben and Jerry's Environmental Performance: History and Highlights* [Homepage of Ben and Jerry's], [Online]. Available: www.benjerry.com [2008, Nov 12] .
- Ben and Jerry's 2008, , *Environmental Action*. Available: www.benjerry.com [2008, Nov 12] .
- Ben and Jerry's 2006, *Ben and Jerry's 2006 Social and Environmental Assessment Report*, Ben and Jerry's.
- Beriss, David and David Sutton (ed) 2007, *The Restaurants Book: Ethnographies of Where We Eat*, 1st edn, Berg Publishers, New York.
- Buchanan, J.M. & Stubblebine, W.C. 1962, "Externality", *Economica*, vol. 29, no. 116, pp. 371-384.
- Bureau, W.H. 1989, "Thousands of uses-millions of tons", *Graphic Arts Monthly*, .
- Burkhalter, S.K. 2006, 08 September 2006-last update, *Starbucks: only green on their logo?* [Homepage of Grist Environmental News and Commentary], [Online]. Available: <http://gristmill.grist.org/story/2006/9/8/114741/6752> [2009, 2/20/2009] .
- Business Wire "Starbucks Environmental Leadership Drives Industry First With Use of the Only FDA Approved Recycled-Content Cup.", *Business Wire*, [Online], vol. 2004, no. Nov 2004. Available from: <http://www.allbusiness.com/environment-natural-resources/ecology/5549263-1.html>. [2/23/2009].
- Chakrabarti, M. 2007, *Restaurants Set Sights on Going Green*, National Public Radio.
- Chipotle 2008, , *F.W.I.* [Homepage of Chipotle: Gourmet Burritos and Tacos], [Online]. Available: www.chipotle.com [2008, Nov 12] .
- Conlin, M. 2008, May 7, 2008-last update, *Greening Your Restaurant*. Available: www.ecopreneurist.com [2008, Dec 10] .
- Corporate Watch 2001, , *Unilever: Corporate Crimes*. Available: www.corporatewatch.org/uk [2008, Nov 12] .
- Corporate Watch , *Corporate Watch : Unilever : Corporate Crimes*. Available: <http://www.corporatewatch.org.uk/?lid=260#cheapresources> [2009, 2/20/2009] .
- Coyne, J. 1993, "Economic concepts and environmental concerns: issues within the greening of business" in *Business and the Environment: Implications of the New Environmentalism*, ed. D. Smith, St. Martin's Press, New York, pp. 40.

- Davison, A. 2001, *Technology and the Contested Meanings of Sustainability*, State University of New York Press, Albany, NY.
- Dimitri, C. & Oberholtzer, L. 2005, , *Organic Price Premiums Remain High* [Homepage of United States Department of Agriculture], [Online]. Available: www.ers.usda.gov.
- Edwards, J. 2008, *Interview*, Blueberry Hill, St Louis, MO.
- Elan, E. 2008, *Green panels color discussion of restaurants' environmental efforts*, Nation's Restaurant News.
- Ells, S. 2008, , *Steve's Vision* [Homepage of Chipotle: Gourmet Burritos and Tacos], [Online]. Available: www.chipotle.com [2008, Nov 12] .
- Ells, S. 2007, *Chipotle 2007 Annual Report*, Chipotle: Gourmet Burritos and Tacos.
- Ells, S. , *Food With Integrity: Steve's Vision. Chipotle: Gourmet Burritos and Tacos*. Available: http://www.chipotle.com/#flash/fwi_story [2009, 2/20/2009] .
- Energy Information Administration 2009, , *Official Energy Statistics from the US Government* [Homepage of US Department of Energy], [Online]. Available: <http://tonto.eia.doe.gov> [2009, Feb 10] .
- EnviroMedia 2009, , *The EnviroMedia Greenwashing Index – About Greenwashing* [Homepage of EnviroMedia Social Marketing], [Online]. Available: <http://www.greenwashingindex.com/what.php> [2009, 2/22/2009] .
- Environmental Defense Fund , *Starbucks Paper Project - Environmental Defense Fund*. Available: <http://www.edf.org/article.cfm?contentID=791> [2009, 2/22/2009] .
- Environmental Leader 2008, May 7, 2008-last update, *Food Services Industry Hammered On Climate Performance* [Homepage of Environmental Leader], [Online]. Available: <http://www.environmentalleader.com> [2008, Nov 12] .
- Esty, Daniel C. and Andrew S. Winston 2006, *Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage*, Yale University Press, New Haven, CT.
- Food and Agriculture Organization of the United Nations 2005. *Deforestation and Net Area Forest Change*. [online] Available: <http://www.fao.org/forestry/30515/en/>. [2009, March 15].
- Food Service Warehouse 2009, , *Investing in Green Equipment for Your Commercial Kitchen* [Homepage of Food Service Warehouse], [Online]. Available: <http://www.foodservicewarehouse.com/education/going-green/investing-in-green.aspx> [2009, February 12] .
- Gale, D. 2007, *Eco-friendly Foodservice: Green and Growing*, Restaurants and Institutions.
- Gold, M.V. 2007, *USDA National Organic Standards Board (NOSB) definition*, Alternative Farming Systems Information Center.

- Gordon, P. 1999, April 3, 1999-last update, *Two Scoops of Responsibility* [Homepage of The Paula Gordon], [Online]. Available: <http://www.paulagordon.com/shows/greenfield/> [2009, February 12] .
- Gossard, Marcia Hill and Richard York 2003, "Social Structural Influences on Meat Consumption", *Human Ecology Review*, vol. 10, no. 1, pp. 1-9.
- Green Seal 2008, October 10, 2008-last update, *Open for Public Comment: Green Seal Proposed Environmental Standard for Restaurants and Food Service* [Homepage of Roots of Change], [Online]. Available: www.rocfund.org [2008, Nov 12] .
- Green Table 2009, , *Green Table: Sustainable Foodservice*. Available: www.greentable.net.
- Green Table 2006, *Guide to Being an Environmentally Friendly Restaurant*, Green Table.
- Green Your 2008, , *Dining Out: Urge your favorite restaurant to go green* [Homepage of Green Your], [Online]. Available: www.greenyour.com [2008, Nov 12] .
- Harrington, B. 2008, *Interview*, Booster's Cafe, St Louis, MO.
- Higgins, A. 2009, January 8, 2009-last update, *Gardening - Activists Urge Obamas to Install Vegetable Garden at White House* [Homepage of The Washington Post], [Online]. Available: <http://www.washingtonpost.com/wp-dyn/content/article/2009/01/07/AR2009010701082.html> [2009, 2/25/2009] .
- Hoffman, A.J. 2000, "Market Drivers." in *Competitive Environmental Strategy: A Guide to the Changing Business Landscape* Island Press, , pp. 93-96.
- Holland, A. 2002, "Are Choices Tradeoffs?" in *Economics, Ethics and Environmental Policy*, eds. D.W. Bromley & J. Paavola, Blackwell Publishers Ltd., Cornwall, pp. 17-33.
- Hoovers 2008, , *Industry Overview: Food Distribution Industry* [Homepage of Hoovers], [Online]. Available: <http://www.hoovers.com/food-distributors> [2009, Feb 10] .
- Horovitz, B. 2008, *Can restaurants go green earn green?*.
- Howard, T. 2005, Oct 16 2005-last update, *Ben & Jerry's returns to social issues* [Homepage of USA today.com], [Online]. Available: http://www.usatoday.com/money/advertising/2005-10-16-ben-jerry-usat_x.htm [2009, 2/19/2009] .
- Hutchinson, Andrew and Frances Hutchinson 1996, *Environmental Business Management: Sustainable Development in the New Millennium*, 1st edn, McGraw-Hill, London.
- Jennifer 2008, *Interview*, Chipotle: Delmar Loop Location, St Louis, MO.
- Kingsolver, B., Kingsolver, C. & Hopp, S.L. 2007, *Animal, Vegetable, Miracle: A Year of Food Life*, HarperCollins, New York.
- Kirby, A. 2004, *Hungry world 'must eat less meat'*, BBC News.
- Kraft, Michael E. & Vig, Norman J. 2006. "Environmental Policy from the 1970s to the Twenty-First Century." in *Environmental Policy*. CQ Press, Washington DC. pp. 1-33.

- Liberto, P. 2008, *Interview*, Meshuggah Cafe, St Louis, MO.
- Lorraine, V. & Flynn, B. 2008, *The great drain robbery*, The Sun.
- Matthews, C. 2006, Nov 29, 2006-last update, *Livestock a major threat to environment* [Homepage of Food and Agriculture Organization of the United Nations], [Online]. Available: <http://www.fao.org/>.
- McCloskey, J., Smith, D. & Graves, B. 1993, "Exploring the Green Sell: Marketing Implications of the Environmental Movement" in *Business and the Environment: Implications of the New Environmentalism*, ed. D. Smith, St. Martin's Press, New York, pp. 84-97.
- McGrew, A. 1993, "The political dynamics of the New Environmentalism" in *Business and the Environment: Implications of the New Environmentalism*, ed. D. Smith, St. Martin's Press, New York, pp. 12.
- McWilliams, J.E. 2008, August 13, 2008-last update, *'Eat Local' Hard To Digest* [Homepage of Aspen Life], [Online]. Available: <http://www.aspenpost.net/2008/08/13/eat-local-hard-to-digest/> [2009, 2/22/2009] .
- Michael 2009, *Interview*, Ben and Jerry's: Delmar Loop Location, St Louis, MO.
- Missouri American Water 2009, , *Rates Information* [Homepage of Missouri American Water], [Online]. Available: www.amwater.com [2009, Feb 10] .
- Missouri State Government 2008, *Water Resources Report 64. Missouri State Water Plan Series. Phase II: Summary and Analysis of Topics in Water Use-Regional Reports*, Missouri State Government.
- Naess, A. 1995, "The Shallow and the Deep, Long Range Ecology Movement: A Summary" in *The Deep Ecology Movement: An Introductory Anthology*, ed. Drengson, Alan R. and Yuichi Inoue, North Atlantic Books, Berkeley, CA.
- National Restaurant Association 2009, , *Conserve: Solutions for Sustainability* [Homepage of National Restaurant Association], [Online]. Available: www.conserve.restaurant.org.
- National Restaurant Association 2009. *Conserve Now: Facts and Stats*. [Online]. Available: <http://conserve.restaurant.org/conservenow/factsstats.cfm>.
- National Restaurant Association 2009, *Understanding the Issues : Water Use*. [Online]. Available: http://conserve.restaurant.org/issues/wateruse_detail.cfm.
- National Restaurant Association 2008, *2008 Forecast-Factbook.*, National Restaurant Association.
- New York Times 2009, , *New York Times Best Sellers* [Homepage of New York Times], [Online]. Available: <http://www.nytimes.com/pages/books/bestseller/> [2009, February 12] .
- Nielsen, B. 2004, *Dining Green: A Guide to Creating Environmentally Sustainable Restaurants and Kitchens*, Green Restaurant Association.

- Noer, M., Ewalt, D.M. & Weiss, T. 2008, *Special Report: Corporate Social Responsibility*, http://www.forbes.com/2008/10/16/corporate-social-responsibility-corporations08-lead-cx_mn_de_tw_1016csr_land_print.html edn, Forbes Magazine.
- Panera 2008, *The Panera Bread Press Kit*, Panera Bread.
- Panera , *Panera Bread > Company Overview*. Available: <http://www.panerabread.com/about/company/> [2009, 2/20/2009] .
- Pollan, M. 2008, *In Defense of Food: An Eater's Manifesto*, Penguin Press HC, New York.
- Pollan, M. 2007, *The Omnivore's Dilemma*, Penguin Press HC.
- Redclift, M. 1987, *Sustainable Development: Exploring the Contradictions*, Methuen and Co., New York.
- Reuters 2006, June 6 2006-last update, *USA: Panera Launches Kids' Menu with Organic Items - Food Industry News* [Homepage of Flex News], [Online]. Available: <http://www.flex-news-food.com/pages/3270/Panera/usa-panera-launches-kids-menu-organic-items.html> [2009, 2/22/2009] .
- Revell, A. & Blackburn, R. 2007, "The Business Case for Sustainability? An Examination of Small Firms in the UK's Construction and Restaurant Sectors", *Business Strategy and the Environment*, vol. 16, pp. 404-420.
- Richgels, J. 2006, September 15, 2006-last update, *Healthy Chains?: Chipotle, Panera Starting to Go Organic and Natural* [Homepage of The Capital Times], [Online]. Available: http://www.organicconsumers.org/articles/article_2405.cfm [2009, 2/22/2009] .
- Roth, B. 2008, June 16, 2008-last update, *Restaurants Produce Green Profits*. Available: www.entrepreneur.com [2008, Nov 12] .
- Schultz, H. 2007, *Starbucks Corporation: Fiscal 2007 Annual Report*, Starbucks Corporation.
- Shabecoff, P. 2000, *Earth Rising: American Environmentalism in the 21st Century*, 1st edn, Island Press, Washington D.C.
- Shipman, C. 2009, *Obama Girls Attend First Day at Sidwell Friends*, <http://abcnews.go.com/GMA/President44/story?id=6577929> edn, ABC News.
- Shrivastava, P. 1993, "The greening of business" in *Business and the Environment: Implications of the New Environmentalism*, ed. D. Smith, St. Martin's Press, New York, pp. 27.
- Smith, D. (ed) 1993, *Business and the Environment: Implications of the New Environmentalism*, 1st edn, St. Martin's Press, New York.
- Smith, D. 1993, "Business and the environment: towards a paradigm shift?" in *Business and the Environment*, ed. D. Smith, 1st edn, St. Martin's Press, New York, pp. 1.
- Splash, C.L. 2002, "Empirical Signs of Ethical Concern in Economic Valuation of the Environment" in *Economics, Ethics, and Environmental Policy*, eds. D.W. Bromley & J. Paavola, Blackwell Publishers Ltd., Cornwall.

- Stafford, E.R. & Hartman, C.L. 1996, "Green Alliances: Strategic Relations Between Businesses and Environmental Groups", *Business Horizons*, vol. March-April 1996, pp. 50.
- Starbucks 2006, *Starbucks Company: Corporate Social Responsibility Report*, Starbucks Company.
- Starbucks , *The Proof is in the Cup: Starbucks Launches Historic New Pike Place Roast™* | Starbucks Coffee Company. Available: <http://www.starbucks.com/aboutus/pressdesc.asp?id=855> [2009, 2/22/2009] .
- Starbucks , *Starbucks Foundation and Earth Day Network* | Starbucks Coffee Company. Available: <http://www.starbucks.com/aboutus/earthdaynetwork.asp> [2009, 2/22/2009] .
- Sullivan, T.F.P. 1992, *The Greening of American Business*, 1st edn, Government Institutes, Inc., Rockville, Maryland.
- Sustainable Table 2009, , *Buy Local* [Homepage of Sustainable Table: Serving up healthy food choices], [Online]. Available: www.sustainabletable.org.
- The Associated Press 2009, *Whole Foods shares rise on 1st-quarter results - News Wires - CNBC.com*, <http://www.cnbc.com/id/29280678> edn, CNBC.com.
- The Economist 2006, "Food Politics: Voting with Your Trolley", *The Economist*, vol. 381, no. 8507, pp. 73.
- Thompson, a.S. 1999, "Starbucks Case Study" in *Strategic Management*, <http://www.mhhe.com/business/management/thompson/11e/case/starbucks.html> edn, McGraw-Hill, .
- Tilley, F. 2000, "Small Firm Environmental Ethics: How Deep Do They Go?", *Business Ethics: A European Review*, .
- Unilever 2009, , *Unilever Global*. Available: www.unilever.com [2009, February 12] .
- US EPA 2007, *Municipal Solid Waste in the United States: 2007 Facts and Figures*, US Environmental Protection Agency.
- US Geological Survey 2003, *Ground Water Depletion Across the Nation. US Geological Survey Fact Sheet 103-03.*, US Geological Survey. <http://pubs.usgs.gov/fs/fs-103-03/>.
- USBCSD 2007, , *US Business Council for Sustainable Development (USBCSD)* [Homepage of USBCSD], [Online]. Available: <http://www.usbcسد.org/values.asp> [2009, 3/3/2009] .
- Vesterby, M. & Krupa, K.S. 2001, *2001 Major Uses of Land in the United States, 1997 Statistical Bulletin No. (SB973)*, United States Department of Agriculture.
- Volpini, R. April 2, 2002-last update, *Press Release - One Sweet Whirled*. Available: http://www.benjerry.com/our_company/press_center/press/press040202osw.html [2009, 2/22/2009] .
- Warner, M. 2004, November 17, 2004-last update, *Starbucks Continues to Greenwash with Weak Environmental Policy*. Available: <http://www.organicconsumers.org/starbucks/recycle.cfm> [2008, Nov 12] .

Wengraf, T. 2001, *Qualitative Research Interviewing*, Sage Publications Ltd.

Wood, D.B. 2007, *More restaurants are going green by going local*.

World Watch Institute 2008, , *Good Stuff?-Paper* [Homepage of World Watch Institute], [Online]. Available: <http://www.worldwatch.org/node/1497> [2009, Feb 10] .

Restaurant Interview Questionnaire

Thank you for helping with this study of restaurants and sustainability. My hope in this project is to gain insight into the decision making process of restaurant owners and managers when it comes to the environment. This survey is NOT an evaluation of your restaurant's performance in terms of environmental concerns. It is rather an investigation into how restaurants in the St Louis Loop District are currently responding to environmental issues, including the incentives, obstacles, and process involved in creating environmentally-focused changes. Feel free to skip or elaborate on questions as you see fit. Thank you again for your participation!

Restaurant: _____

Ownership: local national multi-national

Representative completing this form

Name:

Position:

Is there anyone at your restaurant particularly responsible for issues concerning sustainability?

Does your establishment have a statement addressing environmental concerns?
If yes, what is it?

If no, why might that be?

- never thought of it
- not a concern of the clientele
- not a concern of the management
- other:

What motivates your business to address environmental issues? (check all that apply)

- Direct customer requests
- Seeking a competitive advantage
- Perceived public relations benefits
- Personal ethical motivation
- Energy or other resource costs
- Other:

Addressing environmental issues at the restaurant is:

Essential A High priority A consideration Unimportant

Environmental sustainability factors into decision making:

Never Rarely Sometimes Always

When considering environmental issues, please rank the following in order of importance:

Food Origins (local, organic, ethically raised, hormone free)

Energy Consumption

Water Usage (kitchen, restrooms, cleaning)

Waste & Disposables (recycling, avoiding non-biodegradables, reducing food waste)

Chemical Usage

All about equal

Do you think locally owned restaurants are held to different standards when it comes to the environment than chains?

Yes, **local businesses** are expected to be more environmentally conscious

No, the expectations are the same

Yes, **large franchises** are expected to be more environmentally conscious

What obstacles have you encountered in attempts to make the restaurant more environmentally sound?

What successes have you had in tackling environmental issues? How were the changes enacted?

If you could hire someone to help your business become more sustainable would you?

Yes, if it was cheap enough

Yes, if it would save me money in the long-term

No, that would not be necessary

Have concerns over Health Department regulations ever prevented you from enacting an environmentally conscious change?

ENERGY

Does your restaurant use energy-efficient light bulbs?

If so, please select which type(s)

Compact fluorescent:

Linear fluorescent:

LED:

At what temperature is the thermostat?

In summer:

In winter:

Does the restaurant support the use or development of renewable energy in any way?

If so, how?

Financial contribution:

Public awareness:

Other:

What prompted you to take these (if any) energy-efficiency actions?

FOOD

Are certain items on your menu identified for being more “sustainable” or environmentally friendly?

Is any of your produce organic?

Do you specifically indicate vegetarian items?

Is any of the meat served “ethically raised”?

Is your milk identified as rBGH free?

Where does the majority of your produce come from?

Missouri

The Mid West

The United States

International Sources

What prompted your business to consider issues of food quality?

RESOURCES

Have you employed any techniques or technologies to reduce water usage?

In the kitchen?

In the restrooms?

Does your restaurant use paper products? (paper towels, paper napkins, packaging)

If so, is any of it made from recycled materials?

Are any of these products designated as “chlorine free”?

What prompted you to conserve water or paper usage?

What difficulties have you encountered in reducing water or paper usage?

WASTE

This restaurant recycles

Plastics

Paper

Glass

Aluminum

Corks

Approximately what percentage of your wastes is recycled?

0-5%

5-10%

10-20%

20-40%

40-60%

60-100%

What type of to-go containers do you use?

Styrofoam

Plastic

Paper (virgin, bleached)

Paper (recycled)

Are they recyclable?

What difficulties have you encountered in recycling at your restaurant?

Does your restaurant use non-toxic chemical cleaners?

PUBLIC INFORMATION

Do you provide any information to the public concerning your business's environmental sustainability?

In what form?

- Word of mouth
- Pamphlet
- Signage in the restaurant
- Information included on menu

Do you perceive a demand for this information from the public?

ENVIRONMENTAL PERFORMANCE

The environmental performance of this restaurant is:

- Superior
- Excellent
- Moderate
- Poor

What improvements in sustainability would you like to see?

- More energy conservation
- Less waste
- More conservation of natural resources (water and paper)
- Less chemical usage

What do you see as the major obstacles to improving your establishment's sustainability?

What do you see as the **disadvantages** of taking action to improve sustainability?

What do you see as the **advantages** of taking action to improve sustainability?

ENVIRONMENTAL RESOURCES FOR RESTAURANTS IN ST LOUIS, MISSOURI

Informational Websites

National Restaurant Association: Conserve.
Solutions for Sustainability.

www.conserve-restaurant.org

Going Greener

<http://www.greenrestaurants.org/>

Restaurant Reformer

www.RestaurantReformer.com

The Green Restaurant Association

www.dinegreen.com

Green Table: Sustainable Foodservice

www.greentable.net

Restaurants and Institutions Magazine

www.rimag.com



Reduce Food Waste

Missouri Revised Statutes, Chapter 192,
Department of Health and Senior Services,
Section 192.081, Donation of Canned or
Perishable Food

Web Site

<http://www.moga.mo.gov/statutes/c100-199/1920000081.htm>

Donate to a food bank!

St. Louis Area Foodbank

Web Site

<http://stlfoodbank.org/howyoucanhelp.html>

Operation Food Search

Web Site

http://www.ofsearch.org/how_help/food_donation.html

Turn food waste into nutrient rich soil!

St. Louis Composting, Inc.

<http://www.stlcompost.com>

Find A Composter www.findacomposter.com

Searchable database of composting facilities.



Energy

3Degrees, Inc.

1641 Washington Ave, St Louis, MO

314-480-7191

<http://www.3degreesinc.com/>

Energy and Environmental Solutions

12400 Olive Blvd Suite 305, St Louis, MO

314-735-0741

<http://www.e2-solutionsinc.com/>

Show Me Energy Solutions

429 Belleview Ave

Webster Groves, MO

314-723-0808

<http://www.showmehomeenergysolutions.com/>



Recycling

EarthWays Center (recycling guidance)

Web Site <http://www.earthwayshome.org>

Fax 314.577.0298 Phone 314.577.0246

3617 Grandel Square, St. Louis, Missouri
63108

Ms. Jean Ponzi, Program Manager, E-Mail

jean.ponzi@mobot.org

Recycling Concepts, Inc.

Web Site <http://www.recyclingconcepts.com>

Fax 314.423.1981 Phone 314.423.1940

8526 Mid County Industrial Drive, St. Louis,
Missouri 63114

Ms. Margaret Gasperi, President, E-Mail

margaret@recyclingconcepts.com

Materials accepted:

commingled containers - aluminum
cans; brown, clear, and green glass
bottles and jars; plastic #1 and #2

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bottles and jugs; steel food cans
paper - cardboard, magazines, mixed
office paper, newspaper
telephone books
Fee: Contact Recycling Concepts, Inc. for
details.
Included: 95-gallon container for
commingled and recycling stand for
office paper.

Strategic Materials

Web Site <http://strategicmaterials.com>
Fax 314.421.2127 Phone 314.621.6928
24 Branch Street, St. Louis, Missouri 63147
Ms. Carrie Ray, Regional Supply Manager,
E-Mail cray@strategicmaterials.com

Materials accepted: container glass (clear,
amber, and green) and plate glass.
Fee: no fees; contact Carrie Ray to
discuss prices offered for materials.
Included: assistance with collection,
containers, and transportation
services.

Sunshine Recycling Inc.

Web Site
<http://www.sunshinerecyclinginc.com>
Fax 314.522.3133 Phone 314.521.9914
5141-B North Hanley Road, St. Louis,
Missouri 63134
Ms. Shelley Stanley, E-Mail
sstanlevsunshine@sbcglobal.net

Materials Accepted: aluminum cans,
corrugated cardboard, hard cover
books, paper (carbonless, colored,
computer, copy, plain, envelopes, fax,
junk mail, letterhead, magazines,
manila folders, newspaper, office,
typing), shredded paper.
Fee: Contact Sunshine Recycling Inc. for
details.
Certificate of Destruction is available.

Green Products and Services:

Food Service and Warehouse
(appliances and everything else)

www.foodservicewarehouse.com

Green Seal's Guide to Green Packaging

www.greenseal.org

Marcal Paper Mills (paper products)

www.marcalpaper.com

*BioCorp (containers, bioplastic bags,
tableware)*

www.biocorpaavc.com

Brenmar Company (containers and cutlery)

www.brenmarco.com

EcoLab (cleaning products)

www.ecolab.com

Consulting and Certification Programs:

The Green Restaurant Association

www.dinegreen.com

*Certified Green Commercial Kitchen
program (Food Service Warehouse)*

www.foodservicewarehouse.com

Green Seal (coming soon)

www.greenseal.org



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ENVIRONMENTAL RESOURCES FOR RESTAURANTS IN ST LOUIS, MISSOURI

Additional Informational Resources

California Environmental Protection Agency - Integrated Waste Management Board. Restaurant Guide to Waste Reduction and Recycling. Online. 1992.

Available: <http://www.ciwmb.ca.gov/Publications/BizWaste/44198016.pdf>

“Developed for food service establishments, this guide presents a variety of suggestions that restaurants can use to reduce the amount of garbage they throw away....a tool that we hope you will look at and use as food for thought on how your business can positively impact our environment and, potentially, your pocket book.”

Green Restaurant Association

Web <http://www.dinegreen.com>

Their website offers environmental guides about recycling, composting, and recycled and non-toxic products. Under “Find Endorsed Products,” there is a database cataloguing products by their features, such as recycled content.

Metropolitan Washington Council of Governments Department of Environmental Programs. Recycling Guidebook for the Hospitality and Restaurant Industry. Online. 2000.

Available: <http://www.mwcog.org/environment/recycling/hotel/mentor/guidebook1.pdf>

“This guidebook provides the steps that restaurants and hotels can follow to implement a waste reduction and recycling program. It profiles ten business programs in the Washington metropolitan area that have successfully established these programs.”

National Restaurant Association. How To Make Your Operation More Environmentally Friendly. Online. 2005.

Available: <http://www.restaurant.org/business/howto/enviro.cfm>

“Reducing food waste is perhaps the most obvious and largest area of your environmental efforts. You can save your establishment thousands of dollars...”

United States Environmental Protection Agency. Solid Waste and Emergency Response. Don't Throw Away That Food: Strategies For Record-Setting Waste Reduction. Online. 1998.

Available: <http://www.epa.gov/epaoswer/non-hw/reduce/food/foodmain.pdf>

“This fact sheet is oriented toward commercial and institutional food discard generators, and highlights record-setting food recovery programs.”

Wisconsin Department of Natural Resources. Recycling and Waste Reduction in the Restaurant Industry. Online. 2001.

Available: <http://www.dnr.state.wi.us/org/aw/wm/publications/recycle/PUBL-CE-282-2001.pdf>