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**WHOLE FOODS: RENEWABLE ENERGY CREDITS, GREEN BUSINESS, AND
CAPITALIST APPROACHES TO CLIMATE CHANGE**

Senior Thesis
Submitted in partial fulfillment of
the Environmental Analysis Major: Society and Development Track

by

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Dedication

For Hanna,
who would never write 135 pages,
but is the only person who will truly know
what it meant for me.

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And Berkeley, my past and present.

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Preface

Personal Motives

“What’s the best way for me to spend my life? How can I be most effective and passionate as an environmentalist? How can I make my environmentalism sustainable and effective?” – A journal entry, August 2008

Freshman year of college, I was desperately searching for a topic on which to write my Intro to Environmental Analysis final term paper. After perusing the internet for hours without success, I finally picked up a book my mom had given me years back from the Bioneers Series. It was called *Nature’s Operating Instructions*, and it included essays from prominent environmentalists in the United States. I loved it. My favorite essay was the preface from Paul Hawken’s book *The Ecology of Commerce*. I was intrigued by the idea of a radically efficient and biologically based economy. My government teacher senior year of high school had taught me to fear capitalism as an exploitative and conscience-less force destroying our Earth and social relationships. But my conservative grandfather, an ex-communist turned capitalist, had been careful to counter my hippie parents’ rearing by lecturing me extensively on the superiority of capitalism as an economic system for the past eighteen years of my life. “But what about ecosystems Grandpa?” I would ask, and inevitably the conversation would turn to the horrible exploits of the Soviet communist regime and warnings against any rash action that had to do with radical student organizations—he had learned his lesson and then some.

Hawken’s essay was my first time encountering an opinion that did not pit environment against economy as if the two were mortal enemies from time immemorial. Nowadays, with the popularization of Environmental Economics (a field that has roots in the 70’s), it is common knowledge amongst economists that environmental protection does not necessarily lead to unemployment or losses in GDP. I, however, had never so much as heard the term “Environmental Economics,” so Hawken’s book *Natural Capitalism* was my first introduction to the synergistic relationships between ecological and economic health. Hawken proposed the idea that humans are creative and intelligent enough to reorder their everyday economic actions into a system that was in line with environmental values, one that could even restore ecological services back to health. All

it would take, it seemed, were the right policies, inspirational business leaders, and education. I was sold, and I wrote my term paper extolling the virtues of Natural Capitalism.

I remained there, firm in my beliefs, until I began taking critical classes in race, class, and gender. These explorations into the structural workings of our society and its disproportionately distributed resources gave me a different lens with which to inspect our economy and the powers that orchestrate it through allocation of public funds. I didn't see how this related to environmental issues until I attended the 2007 Youth Powershift Conference in Washington D.C., where I heard the prophet-like Van Jones speak to the issues of environmental justice and environmental racism. I began to connect the dots. The negative externalities of production and transport almost always fall on marginalized populations like the poor, minorities, and women, leading to disproportionately high rates of disease, loss of marketable skills, and death for industrial workers and in highly polluted communities. Suddenly, using American capitalism to address environmental ills seemed to be not quite right, and the path of "green business" seemed to be missing a crucial link. If the current economic system created these inequalities, and has effectively hidden and ignored them since their creation, then how can we rely upon it to bring about the perfect solution to another of the societal ills it has created—that of environmental degradation?

Last year, I spent a semester abroad at the Arava Institute for Environmental Studies in southern Israel. My Environmental Politics professor who had recently written a book on anarchy had a few things to say on the matter. Capitalism, he explained, has historically embodied an intentional ethic of atomization and commoditization of all things—both inanimate and living. Sure, businesses might have voluntarily taken on environmental measures, but while they're patting their own backs and marketing their product as "green," what effect have they actually generated? Professor Uri Gordon argued that these actions, which were taken out of necessity, were being lauded as if they were driven by virtue. It made me wonder: "What is the outcome of proceeding without

this missing piece in place? Can environmentalism minus the virtue be as effective?” All of a sudden I wasn’t so sure.

Carbon offsetting was introduced to me through a film Uri showed about coal-fired power plants in Scotland that used invasive and ecologically-destructive “offset” projects in Brazil in order to meet requirements under the Kyoto Protocol. While local Brazilian watersheds were destroyed by the monoculture eucalyptus “carbon-sink” forests, air pollution was simultaneously continuing in poor neighborhoods in Scotland—leaving nobody better off. I began to understand Uri’s dislike of those who believe capitalist approaches to climate change can get rid of the problems capitalism brought about in the first place. I worried that all the hope I’d been given by Paul Hawken and the promise of green business had been shattered beyond repair.

But I wasn’t willing to accept it so easily. Though I’ve found on a personal level that the soul of environmentalism can easily be lost when partaking in capitalist strategies for saving the Earth, I had to know for myself—can business be a tool for environmental stewardship and change? Is the profit motive a driving force for greater good or an exploiting force against those who are marginalized by society’s capitalist institutions? So here I am, beginning what you could call my senior year “final term paper,” coming *back* to the essay that got me *started* in Environmental Studies to reevaluate the relationship between corporate capitalism and the environment.

“Green business” is one of today’s most nebulous terms. Now that even energy corporations previously assumed to be the enemy of the environment (i.e. Chevron) are claiming to be aiming for “sustainability,” voluntary actions on the part of American businesses seem to be putting environmental costs on the balance sheet—or at least appear to be doing so—and have been increasing by the minute.

The truth is, we are going to have to use businesses to tackle climate change because they have such a strong influence in our American society. Their advertising leads us to believe we need certain things. Their production has inevitable side effects. Their influence over government policies shapes the goals we set for ourselves as a

country, and determines what is “possible” and “impossible” from a cost perspective. Though grassroots approaches may have more integrity because they take into account climate justice, have better effects on individual neighborhoods, and encompass environmental values of egalitarianism, they simply cannot have a fast or broad enough effect to reduce emissions to the level they need to be. Thus it is important to engage with businesses and critique the ways they go about mitigating their impacts on global climate, because “business is the problem, and must be part of the solution.” (Hawken) This is the real impetus for why I want to conduct this exploration into the ability of corporations to truly do good for our environment. I want to look at a company that is truly committed to environmental values, but still engaging in capitalist approaches to climate change, which is why I chose Whole Foods Market as my corporate case study.

At first glance, carbon offsetting appeared to me as an obvious example of what can go wrong in using a capitalist approach to an environmental problem. There seem to be market failures in the markets created to *address* market failures. Carbon offsetting has externalities that again are being ignored in the same ways that carbon emissions themselves were ignored for a long time on the balance sheet. When I found out that Whole Foods had purchased renewable energy credits to offset its store and facility electricity use, I was immediately concerned. I had known Whole Foods as a remarkably responsible corporation that for me and my family represented a healthy alternative to the more traditional grocery stores my friends and their parents shopped at. My first instinct was to believe that carbon offsetting, all questions of effectiveness aside, was completely at odds with the ethics of Whole Foods and Hawken’s principle of the ecology of commerce. However, I strongly believed that business is the problem and must be part of the solution, and so I felt compelled to determine what was exactly at work here.

The thing that really got me about the idea of Whole Foods buying offsets was the lost opportunity to really engage with the concept that people—in their everyday practices—are making decisions that hurt the Earth and other “out of sight” human beings. With one simple click and an online corporate transaction, every Whole Foods employee, manager, and customer would be instantly cleared of guilt and responsibility

for taking responsibility for the environmental effects of his or her participation in consumption. I truly believed, and may still believe, that carbon offsetting was taking the place of a crucial process we need to go through as human beings. Connecting our actions to the consequent ripple effects that stream out into the world, and changing the course of other peoples' and creatures' histories, seemed too important to bypass through an external emissions reduction initiative. While I felt strongly that climate change is a threat that requires us to act quickly and without hesitation, I feared that the REC purchase would be damaging to the everyday people who spend most of their day at work losing their humanity by replacing their potential for creativity and problem-solving with capitalist mantras of "quicker, faster, cheaper."

I began to think. What if, instead of offsetting carbon emissions, workers were asked to put their heads together to come up with a plan to address the source of the problem right here right now? As Hawken writes, "Most business people want to act in responsible ways. Employees want to experience self-worth, security, and meaning in their work." It was then that I discovered Growing Power, a non-profit organization that does just that. Though it by no means had the outstanding resonance in my environmental consciousness that Whole Foods did, Growing Power seemed to offer something completely new through its egalitarian non-profit approach to growing food—and somewhat more believable for a carbon-offset skeptic. I decided to investigate further, and thereupon I had the groundwork for my thesis investigation.

In this thesis, I will investigate the structure, approaches, and mindsets of Whole Foods as well as the challenges, costs, and areas of weakness that came up. To put this in context, I will also examine a non-profit based organization aiming to achieve the same sorts of effects but through a more community-based and ethic-driven approach. The aim is to generate insight on the difference between alternative consumerism and anti-consumerism, in both ethics and practice. If successful, this thesis should get at the question of the value of capitalist responses to environmental crisis and attempt to

address the larger question: “Is capitalist production, distribution, exchange, consumption, and accumulation consistent with ecological sustainability?”¹

In order to address the debates around green business and carbon offsetting, I will compare and contrast a corporate business that “went green” (Whole Foods) to an NGO (Growing Power) created directly out of concern for food justice and environmental degradation. I will examine and compare the strategies they use, how effective they are, obstacles that came up, how justly benefits are distributed, etc. Though it will be impossible to quantitatively identify an accurate carbon footprint for each operation (because of widely varying metrics used in such calculations), I will reference the available empirical data for the capitalist approach of carbon offsetting, using Whole Foods Markets as a focal point of reference for the excessively energy-intensive food industry as a whole. It is my belief that these case studies will be valuable because they tangibly illuminate the problems that exist within market phenomena, and because they can be used as pieces of evidence to support or negate theories about the best course of action. They can help to identify flaws and can provide examples for improvements to be made in other entities within their field.

Why Whole Foods?

“Oil is used for the chemical fertilizers that go to pollute the soil and water. Oil is used to displace small farmers with giant tractors and combine harvesters. Oil is used to industrially process food. Oil is used for the plastic in packaging. And finally, more and more oil is used to transport food farther and farther away from where it is produced.”²
-Vandana Shiva

Whole Foods is an interesting case study for several reasons. The first is that it is a pioneer within the food industry. Whole Foods is a supermarket that helped to introduce organics to the mainstream and is at the forefront of most environmental developments enacted by enterprises of its kind. A Fortune 500 Company, Whole Foods represents a fair share of the market for organic foods, an environmentally-conscious yet imperfect

¹ Martin O'Connor, ed., Is capitalism sustainable? political economy and the politics of ecology (New York: Guilford P, 1994).

² Vandana Shiva, Soil Not Oil: Environmental Justice in an Age of Climate Crisis (Cambridge, MA: South End Press, 2008).

sector of an industry that contributes significantly to climate change. The role that supermarkets are playing in the food and agriculture industry is too significant to be ignored when given the facts about the U.S. food system's contribution to anthropogenic climate change and other environmental catastrophes. Through critically examining the depth and scope of Whole Foods' actions to mitigate and abate greenhouse-gas emissions, and other harmful side effects of industrial processes, we can gain understanding of the challenges facing green businesses of this scale.

Even within the organic food industry, "big agriculture" is a concern. In 2002, a study conducted by the Organic Farming Research Foundation found that fifty-three percent of organic vegetables were channeled directly to retail stores and 34 percent to wholesale channels—some fear wholesalers and supermarkets will siphon away the sales from farmers' markets."³ If large farmers produce their food according to organic standards, but then ship it across the world where it is packaged, stored, refrigerated, bought, and driven home, we still have a problem with fossil-fuel use and greenhouse gas emission.

The second factor in the importance of Whole Foods as a case study for the field of green business is because it is a corporation that goes beyond the symbolic sense of "green business." It is not a company that paints its logo green and offers "eco-friendly" products as sort of a specialty line or one-time promotion. Its environmental values truly infuse Whole Foods Market from its farmers to its cashiers to its CEO. Thus, it cannot be knocked down single-handedly by accusations of greenwashing, and it will be more interesting and complex to examine than would a paper on an easy target. From it, I hope to glean some insight on the relationship of capitalism, green business, and the environment. Again, Whole Foods is a corporation, and as admitted by CEO John Mackey, answers first and foremost to its stakeholders in all decisions. Thus there must be limitations as to what it can accomplish, especially considering that a store of its size must rely on industrial agriculture and extensive transportation.

³ Samuel Fromartz, Organic, Inc: Natural Foods and How They Grew (Orlando, FL: Harcourt, Inc., 2006).

Lastly, and most importantly, since carbon offsetting is part of Whole Foods' energy strategy its purchase of RECs for 100% of their electricity can be examined against the critiques posited by skeptics of carbon offsetting. More generally, these critiques can be applied to market-approaches to climate change. Fortunately, my Uncle Lee, a staunch environmentalist and loving hippie, is the environmental coordinator, or "EcoCzar," of the Whole Foods North Atlantic region and thus I had an "in" with the company to get the scoop on what led to Whole Foods' decision to offset, and how the decision has affected overall perceptions, attitudes, and commitments of the company toward the issues of addressing climate change and securing a sustainable and safe energy supply for the country.

Why Growing Power?

Often it helps to solidify the strengths and weaknesses of one entity to compare it to another that does not share the factor you suspect of making the first entity problematic. We as environmentalists are torn and hindered from bringing about the kind of change we'd like to see, because in a capitalist market economy it is impossible to impose limits on trade and production (both of which require environmental destruction resource and exploitation) while simultaneously achieving social justice. I want to compare a radical/reactionary approach with an incentive-based capitalist approaches to environmental crisis in the atmosphere. I hope to get a better understanding of the pros and cons of each approach.

Limitations:

There will be obvious limits to how much my evidence and analysis will be able to give to the field of business environmentalism and environmental economics. Though I will be looking at a variety of sources and opinions on carbon offsetting and other "green" business strategies, it is necessary to limit my focus to only one industry such that depth is not sacrificed for breadth. Additionally, the level of economic analysis will be lower than any traditional economics research paper as I am working only with a minimal background in formal economics (Intro Macro, Intro Micro, Natural Resource Econ in progress). This thesis will not be a formal economic analysis nor a purely

philosophical paper—rather it will combine my knowledge of both fields and draw upon resources that are put forth by both economists and environmentalists alike—as well as environmental economists. This, however, should not detract from the goal of my thesis exploration, as I primarily want to look from an ethical, economical and ecological standpoint at the phenomenon of green business.

The academic and journalistic literature on capitalist environmentalism is surprisingly abundant, and when one adds the dimension of green business strategy and corporate social responsibility, the wealth of resources expands tremendously. I hope that this process will follow a somewhat organized and chronological order, though it may be the case that I will draw from sources as I become aware of their contribution to the field and their relevance to my study. Inevitably, I will combine my understanding of environmental systems analysis with a background in philosophy of ethics as a double lens through which to look at the current trends in the world economy. Though there is much to be said about carbon offsetting as it exists in the international market, in order to limit the length and time-scale of this thesis I will restrict the main body of my study both socially and geographically to American corporate responses to environmental crises.

Chapter 1: Introduction
Food and Climate
Agriculture, Food and Climate, and American Responses

“How we grow our food and distribute it is part of the politics of climate change.”
Vandana Shiva.

I. Introduction

There are infinite things to point out about the food industry and its ethical, political, and social implications, but the main focus for this study is the carbon footprint of the American system. I will give background on the relationship between food production and climate change in order to introduce the reasons why companies like Whole Foods Market have decided to address their greenhouse gas emissions, in many cases through voluntary carbon offsetting. The food industry plays a significant, complex, and interdependent role in the United States’ contribution to climate change that is frequently not recognized by the American mass media.⁴ Though most Americans may think only of grocery stores when they consider the food on their dinner plates, the carbon dioxide footprint of the food industry includes more transactions than simply farm to fork. Food systems can be defined as “everything and everyone involved in producing, processing, distributing, consuming and disposing of food”⁵ and can be subject to evaluation under criteria including “organic, distribution, energy climate change, water, waste, packaging, labor, animal care, consumer education and governance.”⁶

II. The Positive Side of the Green Revolution (giving credit)

“Until about 200 years ago, climate was a critical determinant for food security. Since the advent of the industrial revolution, however, humanity’s ability to control the forces of nature and manage its own environment has grown enormously. As long as the economic returns justify the costs, people can now create artificial microclimates, breed

⁴ Iris L. Chan, Roni A. Neff, and Katherine C. Smith, "Yesterday’s dinner, tomorrow’s weather, today’s news? US newspaper coverage of food system contributions to climate change.," Center for a Livable Future, Johns Hopkins Bloomberg School of Public Health (2008).

⁵ Ibid.

⁶ GreenBiz Staff, "Food Industry Puts Green Initiatives on the Menu," Daily News on Green Business, Business and Climate Change and Sustainable Business Practices, 13 Aug. 2008, GreenBiz, <www.greenbiz.com>.

*plants and animals with desired characteristics, enhance soil quality, and control the flow of water.”*⁷

The Green Revolution is frequently touted as the historical event that allowed countries now considered “developed” to exponentially increase their food production. Between 1950 and 1984, world grain production increased 250% thanks to fossil-fuel based fertilizers, pesticides, and irrigation.⁸ In the U.S., agricultural output has risen at an approximate annual rate of 2 percent since 1945 through increases in input productivity by means of chemical fertilizers and pesticides and efficiency measures.⁹ The number of farms in the U.S. has decreased as the average size has more than doubled from 1950-1998, but fewer and larger farms does not necessarily merit the nightmarish situation environmentalists might immediately call to mind. As pointed out by scholar Milton Hallberg, the positive side of an industrialized food system is that “consumers in the United States have been able to enjoy a rather abundant and uninterrupted food supply at low prices. U.S. consumers spend less of their disposable income on food than do consumers in any other nation.”¹⁰

According to a recent FAO report, “Advances in storage, preservation and transport technologies have made food processing and packaging a new area of economic activity.”¹¹ These feats of the industrial and green revolutions have allowed food distributors and retailers to “develop long-distance marketing chains that move produce and packaged foods throughout the world at high speed and relatively low costs,” increasing access to and overall volume of food availability.¹² According to the FAO report, food system processes like food processing, distribution, acquisition, preparation, and consumption are as important for food security as food and agricultural production

⁷ United Nations, Food and Agriculture Organization, Climate Change and Food Security: A Framework Document (Rome, 2008).

⁸ Dale A. Pfeiffer, Eating Fossil Fuels: Oil, Food, and the Coming Crisis in Agriculture (Gabriola Island, BC: New Society, 2006).

⁹ Richard M. Adams, Brian H. Hurd, and John Reilly, A Review of Impacts to U.S. Agricultural Resources, Feb. 1999, The Pew Center on Global Climate Change.

¹⁰ Milton C. Hallberg, Economic Trends in U.S. Agriculture and Food Systems Since World War II (Ames, IA: Iowa State UP, 2001).

¹¹ United Nations, Food and Agriculture Organization, Climate Change and Food Security: A Framework Document (Rome, 2008).

¹² Ibid.

themselves.¹³ The advent of “supermarkets” has provided people in industrialized countries with access to a large variety of year-round offerings and have essentially replaced reliance on small shops that sell high-quality but seasonally limited local produce.¹⁴ These developments have decreased dependence on climatic and geographic specificities and allowed food to be purchased at the same volume and with the same diversity of options year round in industrialized countries. While industrialized countries benefit most from these advances, “developing” countries supposedly prosper from globalization and access to larger markets according to capitalist free-market logic.

Many scholars believe that, “Today, food insecurity persists primarily in those parts of the world where industrial agriculture, long-distance marketing chains and diversified non-agricultural livelihood opportunities are not economically significant.”¹⁵ But as we are frequently reminded by economists, there is no such thing as a free lunch. The industrialization and intensification of agriculture has a darker shadow: in particular, climate change.

III. How industrialized agriculture influences Climate Change (the downside)

In 2007, the Intergovernmental Panel on Climate Change (IPCC) found that agriculture was accountable for producing over 13% of the world’s anthropogenic greenhouse gas emissions, and indirectly responsible for an additional 17.4% caused by deforestation and other environmental degradation related to changed land use for food production. In the United States, agriculture contributes close to 10% of national emissions and an even larger percentage when considering other food system processes. Certain types of agriculture account for a disproportionate amount of energy use and emissions, such as livestock production which is estimated by the FAO to produce close to a fifth of emissions leading to global anthropogenic climate change.¹⁶ While Americans are fretting about the mileage their cars are getting and how to set up better

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Chan, Neff, and Smith.

modes of public transportation (both important things to consider), a gold mine of uncaptured reductions may actually be sitting on the plate in front of them. (See Figure 1)

A number of leaders in sustainable food and agriculture were recently asked to give a five minute elevator pitch to President Barack Obama about how he should approach environment, energy, climate, and food policy. Here is what Michael Pollan advocated: “Progress on the all-important issues of energy independence, climate change, and health care costs depends on reform of the food system--and, crucially, an ability to connect all those dots when making policy.” The link between our modern industrial agricultural system and anthropogenic climate change has become more and more clear over the past decade. According to Pollan, “After cars, the food system uses more fossil fuel than any other sector of the economy — 19 percent. And while the experts disagree about the exact amount, the way we feed ourselves contributes more greenhouse gases to the atmosphere than anything else we do — as much as 37 percent.”¹⁷

As Pollan points out, the intensity and scale of the way we feed ourselves has led us to a point where our food is wrapped up with our oil in the same ticking time bomb. He estimates that 17% of our fossil fuel use goes to “feeding ourselves.”¹⁸ Most of these emissions come not from carbon dioxide, the infamous poster-child of global warming, but from methane and nitrous oxide released into the atmosphere by synthetic fertilizers, biomass burning, livestock manure, livestock belching, and crop production. According to Vandana Shiva, the global atmospheric concentration of methane has increased from 715 ppb (pre-industrial) to 1,774 ppb (2005) and the concentration of N₂O, “largely due to chemical fertilizers in agriculture” increased from 270 parts per billion to 319 parts per billion in 2005.¹⁹ (See Figure 3) Other food-related contributors to climate change include processing and packaging, globalization of the food industry, the rise of supermarkets as opposed to small shops and markets, consumers travelling farther distance to purchase food, and reliance on resource-intensive feed for livestock.

¹⁷ Michael Pollan, "Farmer in Chief," *New York Times Magazine* 9 Oct. 2008.

¹⁸ Michael Pollan, "My Letter to Whole Foods," letter to John Mackey, 12 June 2006.

¹⁹ Shiva.

Not only does our food system contribute to climate change and fossil-fuel reliance, but it also leads to a multitude of other environmental crises. For example, runoff from crops and livestock farming is disastrous for drinking water supplies and groundwater ecosystems because of high levels of nitrates and phosphates present in fertilizer and cattle waste. According to a study on the economic trends in U.S. agriculture since World War II, the per-acre application of nitrogen fertilizer increased tenfold between 1950 and the early 1970's, and has continued to increase steadily. Per-acre use of phosphate has increased by about threefold since 1950,²⁰ and per-acre pesticide use has increased tenfold since 1950.²¹ (See Figure 2) Pesticides used on non-organic farms are shown to make agricultural workers and nearby residents sick and unable to work. Soil erosion from over-tilling and loss of seed biodiversity from monoculture cropping limits the future productivity of agricultural land such that the American food supply looks more unsustainable by the day. These unsustainable and environmentally degrading practices increase the chances that Americans will have to rely on imported food to a higher degree in the future, a trend that would add to overall food-miles and thus reinforce the positive feedback loop between climate change and food instability.

IV. Lack of Media Attention

Despite recent works by John Robbins, Michael Pollan, and Vandana Shiva, the connection between agriculture and climate change has been largely ignored in the mainstream news. A study conducted by researchers at Johns Hopkins Bloomberg School of Public Health reports that although there is strong evidence that what we eat and how it is produced affects climate change, only 2.4 percent of climate change articles in sixteen leading daily U.S. newspapers from September 2005 to January 2008 mentioned food production and agriculture's contribution to greenhouse gas emissions.²² Additionally, a mere 0.5% of climate change articles made specific reference to greenhouse gas emissions from livestock and meat production, despite the fact that

²⁰ Hallberg.

²¹ Hallberg.

²² Chan, Neff, and Smith.

livestock production accounted for close to 20% of world anthropogenic greenhouse gas emissions (more than the contribution from transportation) in 2006. (See Figure 4) Though the researchers found that coverage increased slightly over time, the general public remains generally unaware of the warming potential of what they eat.

It's clear that the linkage needs to be further revealed to the public if our politics, economy, and culture are going to change to reflect the need to eat in a way that maintains ecosystem stability and connects us to the Earth. While it's a step forward that scholars and environmental activists have recognized the nexus between food, farming, and climate change, the massive scale of the problem necessitates a massive adjustment on the part of the entire population.

V. How Climate Change Threatens Food Security (the other side of the coin)

“A food crisis is emerging as a result of the convergence of climate change, peak oil, and the impact of globalization on the rights of the poor to food and livelihood.”²³
-Vandana Shiva

“The impact of climate change on agricultural production, along with such false solutions to climate change which divert food and land from the poor to the non-sustainable energy needs of the rich, further exacerbate the food crisis.”²⁴
-Vandana Shiva

The relationship between agriculture and climate change is, like most ecological relationships, not unilateral. Just as industrial farms contribute largely to the building concentration of greenhouse gases in the atmosphere, climate change in turn threatens to worsen the inequalities between the global rich and the global poor via food. Climate change threatens not only the world's productive land but also those who rely on it, thus introducing the important issue of food security to the international arena. The influence of climate change on various geographical and socioeconomic regions will not be arbitrary—the global poor, islanders, and those living in coastal areas will be hurt most

²³ Shiva.

²⁴ Shiva.

by changes in weather patterns, the spread of disease, and declines in agricultural productivity. (See Figure 6)

In 2006, a CGIAR (Consultative Group on International Agricultural Research) report found that “projected temperature increases and shifts in rainfall patterns are likely to decrease growing periods in sub-Saharan Africa by more than 20 percent, with some of the world’s poorest nations in East and Central Africa at greatest risk.” As climate change shifts wheat production northward across the globe, it will create opportunities for farmers in North America, much of Europe, and Russia. Developing countries, on the other hand, which “are already home to most of the world’s poor and malnourished people and have contributed relatively little to the causes of global warming,” are expected to shoulder the worst effects of climate change and suffer most from losses in food production,” according to a climate change scientist with the World Agroforestry Centre.²⁵ The implications of this are severe, as the global South’s reliance on agriculture for food and work should not be underestimated. According to the report, agriculture provides the “primary source of livelihood for 36 percent of the world’s total workforce,” with even higher figures for highly populated countries in Asia, the South Pacific, and sub-Saharan Africa. “If agricultural production in the low-income developing countries of Asia and Africa is adversely affected by climate change, the livelihoods of large numbers of the rural poor will be put at risk and their vulnerability to food insecurity increased.”²⁶

But we cannot assume that climate change will affect *only* the global poor. According to the recent FAO report on climate change and food security, the tendency to view locations dependent on rain-fed agriculture as the areas of most concern is somewhat shortsighted. The authors explain that:

This viewpoint does not take account of the other potentially significant impacts that climate change could have on the global food system, and particularly on market prices. These impacts include those on the water

²⁵ J. R. Pegg, "Climate Change Increases Food Security Concerns," Environment News Service, 5 Dec. 2006, <www.ens-newswire.com>.

²⁶ United Nations, Food and Agriculture Organization, Climate Change and Food Security: A Framework Document (Rome, 2008).

and energy used in food processing, cold storage, transport and intensive production, and those on food itself, reflecting higher market values for land and water and, possibly, payments to farmers for environmental services.²⁷

Additionally, the report claims that:

Climate change variables influence biophysical factors, such as plant and animal growth, water cycles, biodiversity and nutrient cycling, and the ways in which these are managed through agricultural practices and land use for food production. However, climate variables also have an impact on physical/human capital – such as roads, storage and marketing infrastructure, houses, productive assets, electricity grids, and human health – which indirectly changes the economic and socio-political factors that govern food access and utilization and can threaten the stability of food systems. All of these impacts manifest themselves in the ways in which food system activities are carried out.²⁸

Extreme weather events induced by climate change will damage, and have already damaged, local and national infrastructure, leading to ripple effects throughout the globalized world. A similar effect is seen every time a large oil drilling station is damaged by a storm—prices around the world skyrocket as supply falls from instability and fear in the world energy market. We should not underestimate the ability of climate change to interfere with the industrial food and transport systems we think are so invincible. (See Figure 7)

As Dale Pfeiffer points out in his book, *Eating Fossil Fuels*, the need to expand agricultural production has led to not just to global warming, but also to “most of the wars in recorded history.”²⁹ I would add to his list colonization, slavery, land degradation, loss of biodiversity, chemical pollution, and overextraction of water. Recently, there has been an ugly trend in multinational agricultural corporations where poor people in the developing world are promised food security through genetically modified foods reliant on pesticides and artificial fertilizers, but are actually made worse off because of the harmful effects of these chemicals in their air, water, soil, food and bodies. Monsanto and the like are thus not only fossil-fuel dependent, but are also

²⁷ Ibid.

²⁸ Ibid.

²⁹ Pfeiffer.

responsible for the negative environmental and social effects of “high-yield” crops purported to stem from “humanitarian concern for human nutrition.” In actuality, the development of these products stems from the desire to “make a profit from the sale of agricultural inputs.” According to environmental ethicist Peter Wenz, “Such sales help the economy grow. The unintended result, however, was to impoverish many people in the Third World.”³⁰

And while “developed countries” are frequently held up as the model for “developing” ones to emulate and catch up to, it may be that the United States and others have a little something to learn from those “less developed” than ourselves. As Vandana Shiva points out, industrial agriculture in the United States uses 380 times more energy per hectare to produce rice than a traditional farm in the Philippines. Corn production in the US requires 176 times more energy per hectare than does growing corn on a traditional farm in Mexico.³¹ Food in the industrial agricultural system takes massive amounts of energy to produce, and in turn causes huge amounts of greenhouse gases to be emitted into the atmosphere. Additionally, the effects of climate change on food security around the world are likely to make the practice of importing food from third world countries even more unsustainable and unethical than it currently is today. While the IMF, World Bank, and charitable foundations like the Bill and Melinda Gates Foundation continue to pursue “development” projects in so-called third world countries and multinational corporations move in on “undeveloped” farm land to raise cash crops at a low price, the climate crisis looms bigger and laughs as we move in the wrong direction while patting ourselves on the back for helping the world’s poor.

VI. Sustainable Agriculture and Corporate Responses

The *Stern Review on the Economics of Climate Change* found that agriculture is responsible for 14% of greenhouse gas emissions—a similar figure to the IPCC report

³⁰ Peter Wenz, “Synergistic Environmental Values,” *Environmental Virtue Ethics* (New York, NY: Rowman & Littlefield, Inc, 2005).

³¹ Shiva.

cited earlier in this chapter.³² However, as Vandana Shiva points out, what's missing in the Stern Report figure is that different kinds of agriculture are responsible for different portions of the greenhouse gas emissions. She explains that the report "fails to differentiate industrial, globalized agriculture, which is responsible for a large part of the 14 percent of emissions in agriculture, from non-industrial, biodiverse, ecological agriculture, which has much lower emissions and helps in carbon sequestration." The figure for land use (18% of total emissions) does not incriminate the cutting of tropical forests for agricultural commodities, and a large part of the transport emissions results from unnecessary food miles.³³

In other words, the Stern report's data presentation and subsequent analysis do not allow for a real critique of the status quo in agriculture, and lead to a "pseudo-solution" of carbon trading, which translates into business as usual for the agrochemical and agribusiness corporations profiting from globalized, industrialized agriculture. These market proposals, according to Shiva, benefit the U.S., and other industrialized countries that have contributed most to the climate change problem, but hurt those who are most vulnerable to climate change. The U.S. food industry, as one of the biggest and most far-reaching global industries, must be held accountable. Shiva advocates localized and ecological agriculture which can reduce greenhouse gas emissions significantly while "improving our natural capital of biodiversity, soil, and water; strengthening nature's economy; improving the security of farmers' livelihoods; improving the quality and nutrition of our food; and deepening freedom and democracy."³⁴

Small-scale organic farming can certainly help to ameliorate the problems of industrial agriculture. In *Soil Not Oil*, Shiva predicts that a shift to ecological, non-industrial agriculture can engender a two-to seven-fold energy savings and a 5 to 15 percent global fossil fuel emissions offset through the sequestration of carbon in organically managed soil. She estimates that up to four tons of CO₂ per hectare can be

³² Nicholas Stern, "Executive Summary (Full)," *Stern Review: The Economics of Climate Change* Iv (2006).

³³ Shiva.

³⁴ Shiva.

sequestered in organic soils annually. In all sectors, advocates for the environment and social-justice have begun to take responsibility and action. Though it's by no means a modern phenomenon (having roots in ancient subsistence cultures), sustainable agriculture (and green businesses in the food industry) has emerged as a strong and influential force. Environmental activists have explicitly realized the link between large-scale, fossil-fueled industrial agriculture and climate change and have begun to advocate for reforms and even revolutions in the American food system.

A. Farms

*Community Supported Agriculture reflects “an innovative strategy to connect local farmers with local consumers; develop a regional food supply and strong local economy; maintain a sense of community; encourage land stewardship; and honor the knowledge and experience of growers and producers working with small to medium farms.”*³⁵

Many farmers, food-retailers, and citizens throughout American history have taken to heart the benefits of local and ecologically-based food production as well as the wholesome community-based lifestyle it can entail. With the support of environmentally-conscious customers, they have proven that another way is possible.

Patrick Boleman, coordinator of “FLO Food” and student at the University of North Carolina at Chapel Hill says it well in the following:

By creating a more local, decentralized food distribution system, you eliminate an immense amount of energy use involved with the transportation and processing of our food. This can greatly reduce our greenhouse gas emissions, while at the same time decrease our dependence on petroleum based products. As you well know, the majority of our energy in the United States comes from non-renewable resources and agribusiness is fueled by chemicals created from foreign oil.³⁶

From 1993 to 2001, the number of certified organic farms more than doubled—from three thousand to seven thousand. According to Mitch Hallberg, the total is probably closer to between fifteen and twenty thousand, including farms that use organic methods but are uncertified. Hallberg claims that “These are small numbers compared to

³⁵ Cathy Roth, "Community Supported Agriculture," *Vegetable Program*, 2008, UMass Amherst, <http://www.umassvegetable.org/food_farming_systems/csa/index.html>.

³⁶ Patrick Boleman, "Michael Pollan and other food authors and activists offer their elevator pitches for Obama," *Grist* (10 Nov. 2008): , *Grist: A Beacon in the Smog*, Grist, <<http://www.grist.org/article/going-up-part-4>>.

the two million U.S. farms, but the significant thing is that they are growing—unlike other independent farmers, who are disappearing from the landscape.”³⁷

In addition to the rise of organic farming, the ostensible environmental and social benefits of CSA (Community Supported Agriculture) programs are largely responsible for the growing popularity of these mutual partnerships between farms and consuming communities. In 1985, the first official CSA was established at Indian Line Farm in Massachusetts, but as of January 2005, there were more than 1500 CSA farms across the U.S. and Canada.³⁸ Holding fast to the original organic value of local food, CSA’s manage to reduce food miles and achieve seasonality while simultaneously providing a reliable source of food for a relatively large number of people. According to scholars at the University of Massachusetts Amherst, “Community Supported Agriculture represents a viable alternative to the prevailing situation and the long-distance relationship most of us have with the food we eat.”³⁹ It is a partnership of mutual commitment between a farm and a community of supporters which provides a direct link between the production and consumption of food. Supporters cover a farm’s yearly operating budget by purchasing a share of the season’s harvest, and members make a commitment to support the farm throughout the season, and assume the costs, risks and bounty of growing food along with the farmer or grower.⁴⁰ (See Figure 8)

Another ecological, local, decentralized food system is the farmer’s market. Like CSA’s, farmer’s markets keep food dollars in the local community, encourage cooperation amongst local farmers, support biodiversity in regional agriculture, and create opportunities for dialogue between farmers and consumers. In addition, they rely even less on transportation than do CSA’s because they are placed in central locations for any given community. According to the USDA, there were 3,706 American famers’ markets in 2004, twice as many as a decade earlier and up from only a few hundred in

³⁷ Fromartz.

³⁸ "Community Supported Agriculture," Local Harvest, 2009, <www.localharvest.org>.

³⁹ Roth.

⁴⁰ Ibid.

1970.⁴¹ These direct farm outlets supply less than 2 percent of the nation's produce, but are very visible ways to introduce people to organic products. A recent study showed that about 80 percent of all organic farms sell some portion of their crops direct, and that out of 210 farms surveyed, one third of farmer's market vendors in 2002 were certified organic—compared with less than 1 percent of all farmers in the U.S.⁴² Though organic supermarkets like Whole Foods have probably siphoned away quite a bit of business from farmer's markets, there remains a loyal contingent who insist that farmer's market produce is fresher, healthier, and less carbon-intensive than that from the grocery store. Farmers, in turn, receive better prices in farmers' markets than from wholesalers or distributors, frequently up to 250 percent higher.⁴³

B. Consumers/Citizens

Environmental scholars, policymakers, think tanks, and ordinary citizens have also recognized the link between food and environmental degradation, and are beginning to see their role in the reduction of food-related greenhouse gas emissions by opting to purchase local, organic, and low-carbon foods. One major commitment people have taken is eating vegetarian or vegan diets. Though the percentage of Americans who eat a completely vegetarian diet today is still relatively small (2.3-6.7% according to a recent study)⁴⁴, many environmental-minded Americans are choosing to eat less beef and other meat per week because of the revealed linkages between climate and the livestock industry. In 2006, the Food and Agriculture Organization of the United Nations (FAO) reported that livestock production alone accounted for nearly 18 percent of world anthropogenic greenhouse gas emissions—a greater contribution than from transportation. Top impacts of the food system on climate include cattle emissions of methane (a highly potent greenhouse gas); and loss of trapped carbon from soil and plants following land clearing for crops or pasture.

⁴¹ Fromartz.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ Charles Stahler, "How Many Adults are Vegetarian?" *Vegetarian Journal* (2006), *The Vegetarian Resource Group Vegetarian Journal*, The Vegetarian Resource Group, <<http://www.vrg.org/journal/>>. (A national study conducted by the Vegetarian Resource Group in 2006 found that "2.3 percent of adults aged 18 years or older say they never eat meat, fish, or fowl and, thus, are vegetarian. Furthermore, 6.7 percent of the total say they never eat meat.")

“Consumers,” for lack of a better word, are also supporting CSAs, Farmer’s Markets, and responsible companies like Whole Foods market. They are starting their own gardens, for both personal and community use, and encouraging their children’s schools to adopt schoolyard gardens and healthy lunch options. In addition to changing the way they eat and shop, Americans are demonstrating their concern about the food industry and climate change by joining non-profits, lobbying Congress, and voting for better regulation and practices within the national food industry.

C. Corporations: Food-Processing, Wholesaling, and Retailing Industries

It is no surprise that once consumers began to demonstrate a desire for more environmentally responsible food, corporations saw the chance for “double green.” Corporate marketing of “sustainable” food products has exploded in the past couple decades. According to the study of climate change and food media coverage,

Food industry efforts to reduce emissions include selective and local purchasing, product labeling, reduced packaging, energy efficiency and carbon offsetting. Agricultural enterprises have reduced emissions including through changes in animal feeds, soil conservation and no-till farming, reduced fertilizer and pesticide use, energy efficiency, increased local distribution, improved waste management, and on-farm energy generation.⁴⁵

Supermarkets in particular have made use of these tactics, in part because energy use in the food sector is comprised not just of growing food and raising of animals, feed and fertilizer, but also include transportation, storage, and in-store use of refrigeration, and lighting. Since farmers market the vast majority of the commodities they produce to food packers or processors, which then sell the products to food wholesalers and retail food stores, it is extremely important that actors in these industries take responsibility for their emissions.⁴⁶ Luckily, Whole Foods and others like it have stepped up to meet the challenge of purchasing and selling food in climate-friendly and socially-just ways.

⁴⁵ Chan, Neff, and Smith.

⁴⁶ Hallberg.

VII. Conclusion

The bidirectional link between food production and climate change has implications for food security (availability, accessibility, utilization, and stability), human health, social inequalities, and business sustainability within the food sector. The risks of climate change include extreme weather and changed precipitation patterns, crop failure, increase in pests and water-borne illness, loss of seed diversity, and loss of adequate insurance. Low-income people and communities in urban areas that are already vulnerable to food shortages are likely to be the first, and most intensely, affected, but the rural poor are the most unequipped to deal with the negative effects of climate change.⁴⁷ These countries and factions will face increasing reliance on food-aid from richer countries and governments, which will simultaneously be struggling to cope with damaged infrastructure to the global food distribution system.

The opportunities for mitigating these risks are numerous. According to a UN Food and Agriculture Organization report, changing consumption patterns and food preparation practices will be necessary to protect food security in many circumstances. “Both market forces and voluntary choices influence individual decisions about what food to eat and how to maintain good health under a changing climate.”⁴⁸ The report argues that raising productivity from better water management in agricultural sectors will be crucial, as will sustainable livestock management. Conservation agriculture can help to maintain biodiversity, sequester carbon, and restore ecosystems to their balance. Even so, challenges remain. For example, “Incentives are needed to persuade crop and livestock producers, agro-industries and ecosystem managers to adopt good practices for mitigating climate change,” and more importantly meeting the growing demand for energy is “a prerequisite for continued growth and development.”⁴⁹ This goal has not yet been accomplished because of a variety of factors, but is being worked on from several angles including government, citizens, and business. In the next chapter, I will examine

⁴⁷ United Nations, Food and Agriculture Organization.

⁴⁸ Ibid.

⁴⁹ United Nations, Food and Agriculture Organization.

the possibilities for green business in addressing climate change and other environmental crises.

END OF CHAPTER 1.

FIGURES

Figure 1

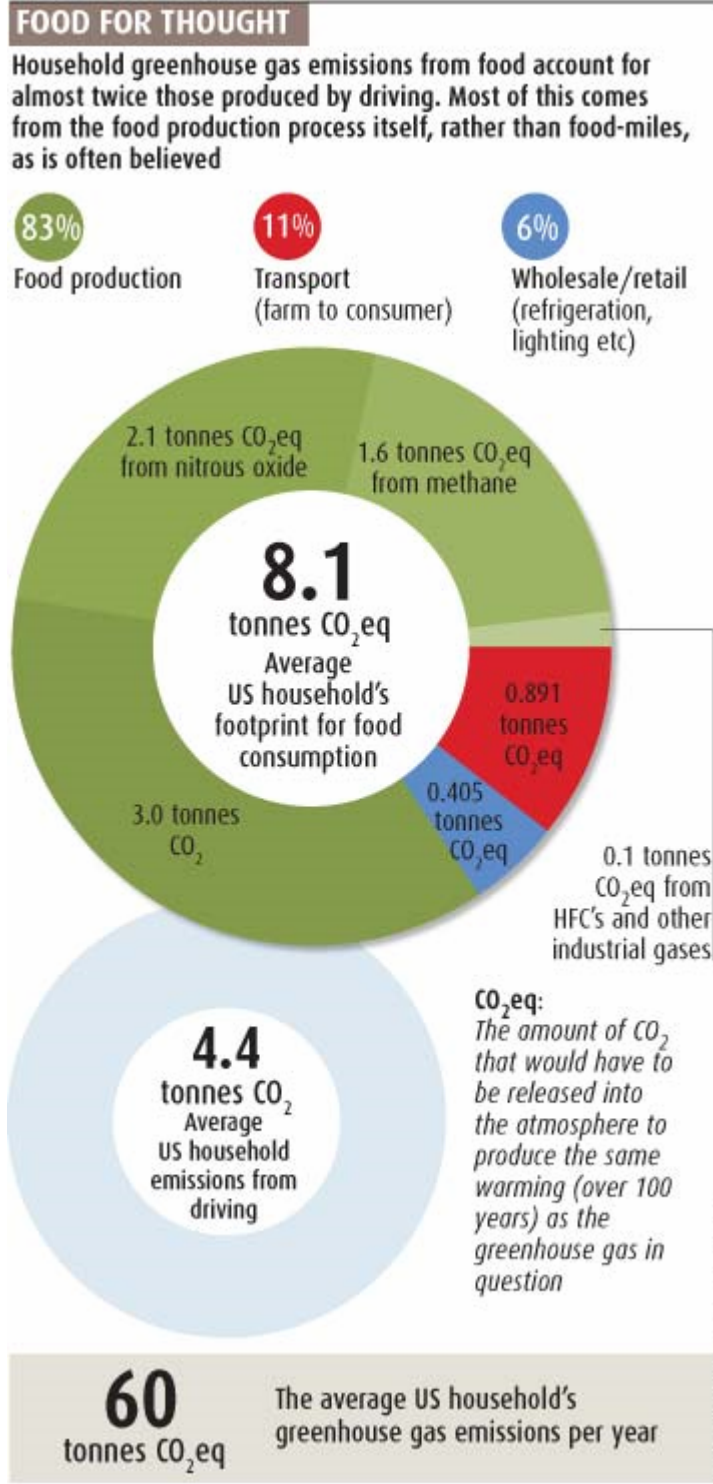


Figure 2

U.S. Commercial Fertilizer Use, 1960-2001⁵⁰

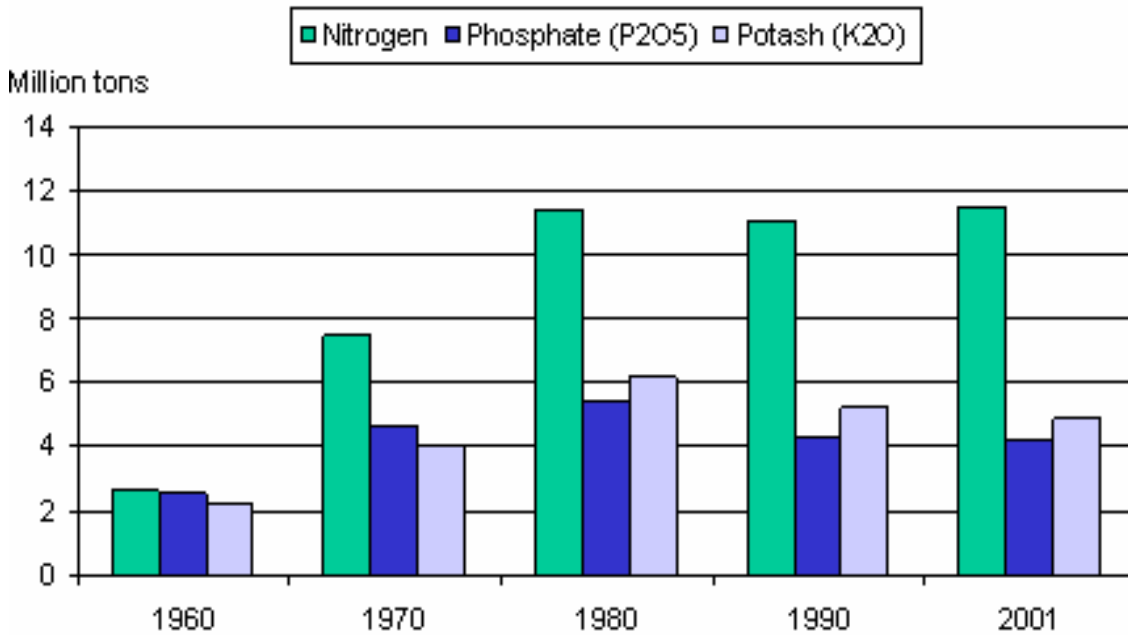
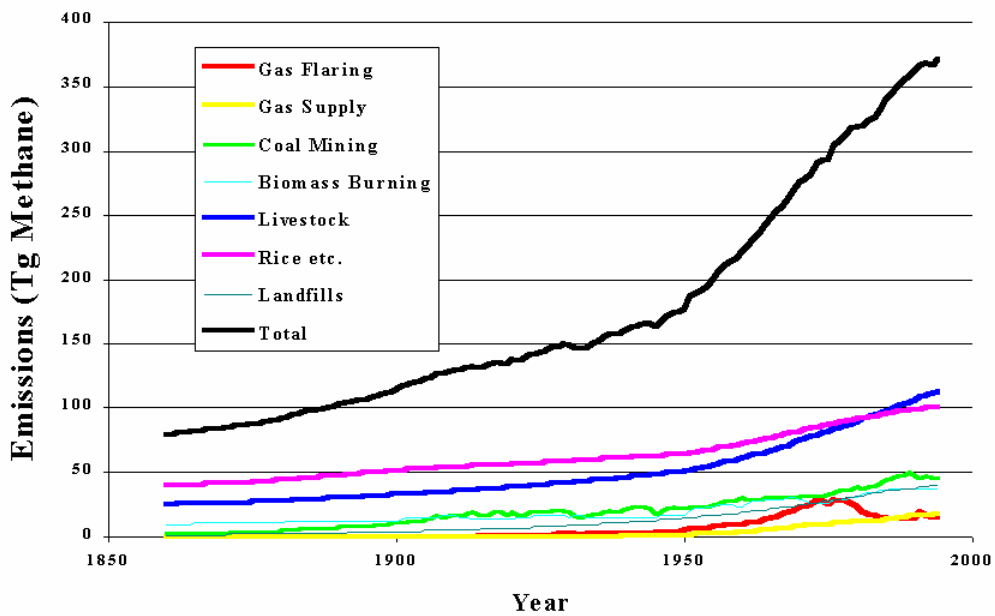


Figure 3

Global Anthropogenic Methane Emissions: 1860-1994

Global Anthropogenic Methane Emissions: 1860-1994

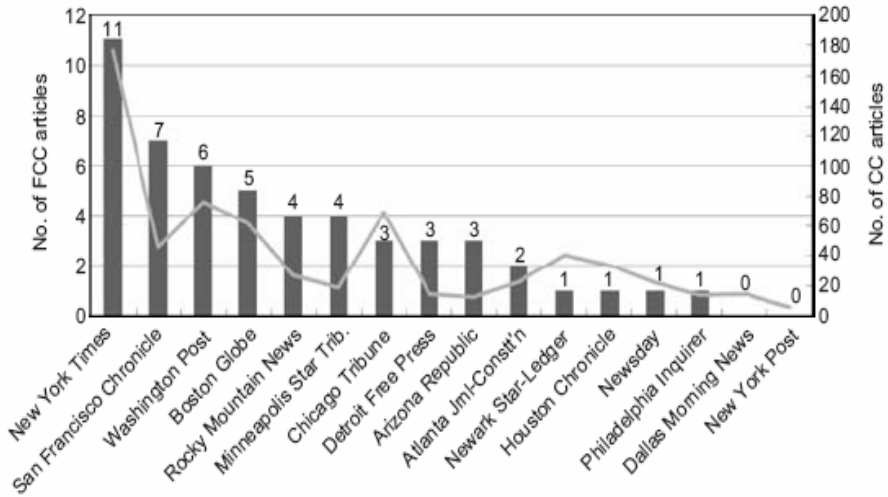
(Stern & Kaufmann)



⁵⁰ Commercial Fertilizers, Rep. (AAPFCO University of Kentucky, 2002).

Figure 4

Number of Articles on “Food and Climate Change” (FCC) and “Climate Change” (CC) by newspaper, in a sample of sixteen leading US newspapers from September 2005 to April 2007.⁵¹



⁵¹ Chan, Neff, and Smith.

Figure 5

Increase in Global Mean Temperatures and its Effect on Food⁵²

| B. Increase in global mean temperatures | | | | |
|--|---|--|--|--|
| Impact on food system assets | Impact on food system activities | Impact on food security outcomes | Impact on other human well-being outcomes | Possible adaptive responses |
| <p>Production assets:</p> <ul style="list-style-type: none"> Trend changes in suitability of land for crop and livestock production Gradual loss of biodiversity Trend changes in vectors and natural habitats of plant and animal pests and diseases <p>Storage, transport and marketing infrastructure:</p> <ul style="list-style-type: none"> Strain on electricity grids, air conditioning and cold storage capacity | <p>Producing food:</p> <ul style="list-style-type: none"> Immediate crop and livestock losses due to heat and water stress Lower yields from dairy animals Reduced labour productivity due to heat stress Trend impacts uncertain, conditional on location, availability of water and adoption of new cropping patterns by farmers <p>Storing and processing of food:</p> <ul style="list-style-type: none"> Upgrade in cooling and storage facilities required to maintain food quality at higher temperatures Increasing energy requirements for cooling <p>Consuming food:</p> <ul style="list-style-type: none"> Higher intake of liquids Lower intake of cooked food Perishable products have shorter shelf life More need for refrigeration Heat stress may negatively affect people's ability to access food (no energy to shop or do productive work) | <p>Food availability (production, distribution, exchange):</p> <ul style="list-style-type: none"> Reduced production of food crops and livestock products in affected areas Local losses could have temporary effect on local markets. Reduction in global supplies likely to cause market prices to rise <p>Food accessibility (allocation, affordability, preference):</p> <ul style="list-style-type: none"> Impacts on incomes, prices and affordability uncertain Changes in preference uncertain <p>Food utilization (nutritional value, social value, food safety):</p> <ul style="list-style-type: none"> Risk of dehydration Risk of ill health from eating food that is spoiled Ability of body to process food reduced due to heat stress or diseases <p>Food system stability:</p> <ul style="list-style-type: none"> Higher cost for storing grain and perishable products | <p>Livelihoods:</p> <ul style="list-style-type: none"> Trend changes in vectors and natural habitats of pests and diseases that affect human health and productivity <p>Social values and behaviours:</p> <ul style="list-style-type: none"> Acceptance of a greater degree of risk and uncertainty as a natural condition of life <p>National and global economies:</p> <ul style="list-style-type: none"> Reorientation of public and private sector investments towards mitigating and adapting to climate change | <p>Policies and regulations</p> <ul style="list-style-type: none"> Greater reliance on weather-related insurance Development of risk management frameworks <p>Farming, forestry and fishery practices</p> <ul style="list-style-type: none"> Trend changes in cropping patterns Development and dissemination of more heat-tolerant varieties and species <p>Food processing, distribution and marketing practices</p> <ul style="list-style-type: none"> Greater use of alternative fuels for generating electricity <p>Food preparation practices</p> <ul style="list-style-type: none"> Greater use of alternative fuels for home cooking |

⁵² United Nations, Food and Agriculture Organization.

Figure 6

Ranges of Estimated Climate Change Effects on Selected Crop Yields in Latin and North America.⁵³

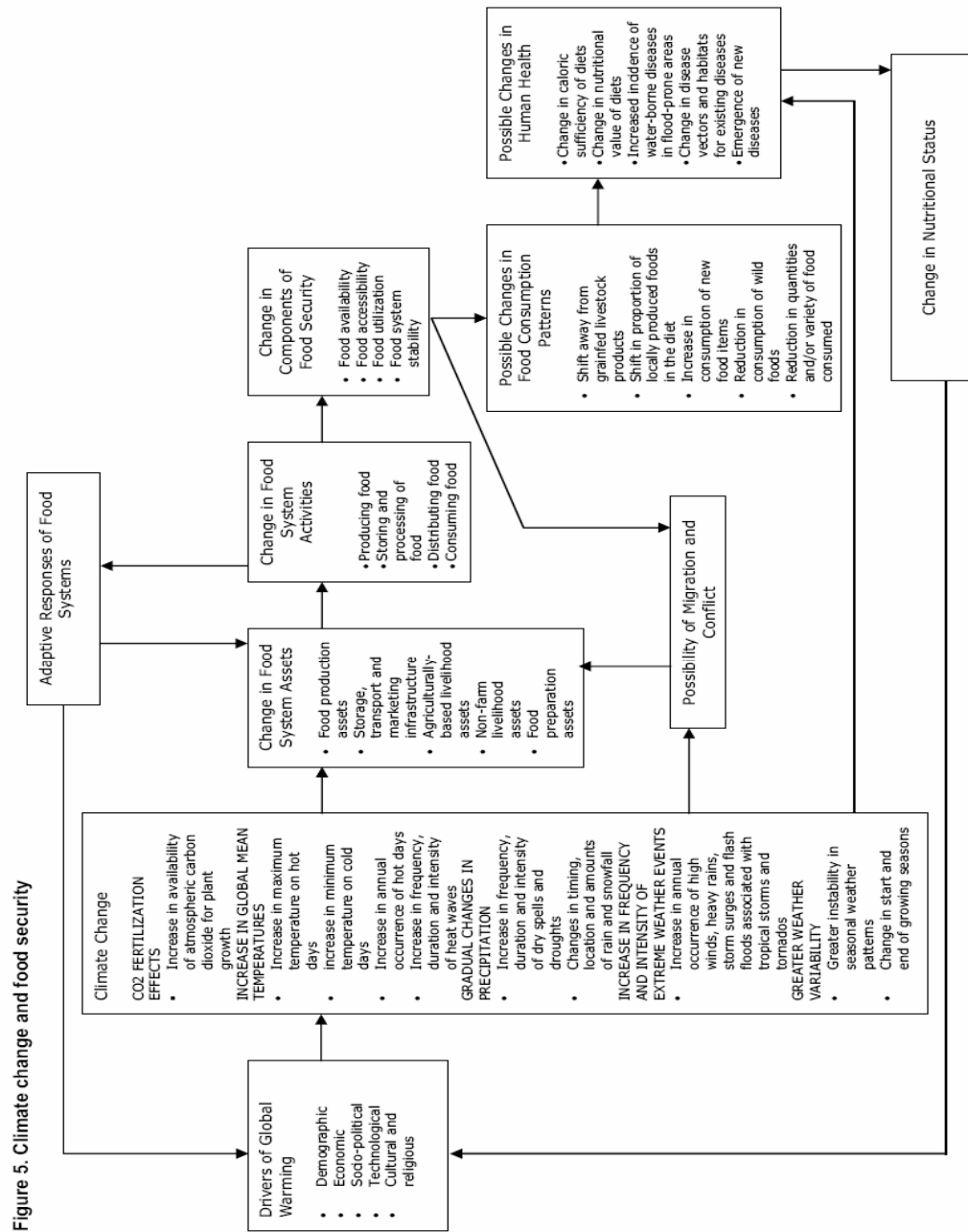
| Location of Study Site | Impact (Crop: Percent Change in Yield) | Climate Change Scenario |
|--|---|--|
| North America | | |
| Canada (Alberta, Manitoba, Saskatchewan, Ontario) | Wheat: -40% to +234% (results varied widely by site and scenario) | GISS, GFDL, UKMO, Incremental* with CO ₂ |
| United States (average of total based on selected sites) | Wheat: -20% to -2% Corn: -30% to -15% Soybean: -40% to +15% | GISS, GFDL, UKMO with CO ₂ |
| Latin America | | |
| Argentina | Corn: -36% to -17% Wheat: +3% to +48% Corn: -4% to -18% Sunflower: +14% to +23% Soybean: -3% to -8% | GISS, GFDL, UKMO, Incremental* with and without CO ₂ GISS, GFDL, UKMO with CO ₂ |
| Brazil | Wheat: -50% to -15% Corn: -25% to -2% Soybean: -61% to -6% | GISS, GFDL, UKMO, Incremental* with CO ₂ |
| Mexico | Corn: -61% to -6% | GISS, GFDL, UKMO, Incremental* with CO ₂ |

* Incremental scenarios = +2°C and +4°C; +20% precipitation and -20% precipitation

Source: IPCC, 1996b

⁵³ Adams, Richard M., Hurd, Brian H., and Reilly, John. "A Review of Impacts to U.S. Agricultural Resources." The Pew Center on Global Climate Change. Feb, 1999.

Figure 7
Climate Change and Food Security⁵⁴



SOURCE: FAO/NRCB.
Figure produced for this report.

⁵⁴ United Nations, Food and Agriculture Organization.

Figure 8

Benefits of Community Supported Agriculture⁵⁵

- CSA's direct marketing gives farmers and growers the fairest return on their products.
- CSA keeps food dollars in the local community and contributes to the maintenance and establishment of regional food production.
- CSA encourages communication and cooperation among farmers.
- With a "guaranteed market" for their produce, farmers can invest their time in doing the best job they can rather than looking for buyers.
- CSA supports the biodiversity of a given area and the diversity of agriculture through the preservation of small farms producing a wide variety of crops.
- CSA creates opportunity for dialogue between farmers and consumers.
- CSA creates a sense of social responsibility and stewardship of local land.
- CSA puts "the farmers face on food" and increases understanding of how, where, and by whom our food is grown.

Good Sources of Information on Food and Climate:

"Energy Use in Organic Farming Systems," MAFF Project OFO 182, 1996-2000; R. Lal, "Soil Carbon Sequestration Impacts on Global Climate Change and Food Security," *Science* Vol. 304 (2004), 1623-7.

Paul Hepperly, "Organic Farming Sequesters Atmospheric Carbon and Nutrients in Soils," (The Rodale Institute, October 15, 2003).

"The Energy and Agriculture Nexus," *Environment and Natural Resources Working Paper No. 4* (Rome: FAO, 2000), 17.

⁵⁵ "SAAN - CSA -UofMass on CSAs," Yahoo! GeoCities: Get a free web site with easy-to-use site building tools, 28 Apr. 2009 <http://www.geocities.com/rainforest/7813/c_umass.htm>.

Chapter 2: Green Business and Carbon Offsetting

Conflict between ideals and profit: Perceived or Real?

“Promoting more effective approaches to climate change involves moving away from the blinkered reductionism of free-market dogma, the false economy of supposed quick fixes and the short-term self-interest of big business.”⁵⁶ – Kevin Smith

“Business is the problem and it must be part of the solution”⁵⁷ –Paul Hawken

I. Introduction

In January, 2006 Whole Foods Market became the only Fortune 500 Company to offset 100% of its electricity use through renewable energy certificates (REC’s). This landmark purchase put enough wind power into the grid to match the electricity load used in all of its stores, facilities, bake-houses, distribution centers, regional offices and national headquarters in the United States and Canada.⁵⁸ The media has eaten up the news: just Google search “Whole Foods, REC’s” and it becomes apparent. Likewise, shareholders seem to read the REC purchase as a signal of the company’s long-term sustainability, both financial and environmental. But upon looking closer, there appears to be a murky shadow of ambiguity surrounding the purchase. What exactly does “offsetting” mean? This lurking sense of discomfort reflects a deeper running sentiment in the realm of corporate approaches to environmental issues. A long-lasting debate continues to run over the topic of green business, stemming from an hunch that tells us we cannot trust profit-seeking enterprises to do the right thing. The dispute surrounds the questions: Are there ways that we can achieve low-resource use economies within a capitalist system? What would these reforms look like? Or do we need a complete revolution away from capitalist modes of production?

⁵⁶ Kevin Smith, "Offsetting Democracy: Exposing the inadequacies of carbon trading," *Resurgence* Apr. 2008, <http://www.tni.org/detail_page.phtml?&act_id=18013&menu=11c>.

⁵⁷ Paul Hawken, *The Ecology of Commerce* (New York, NY: Harper Collins, 1993).

⁵⁸ "Fast Facts," *Whole Foods Market Pressroom*, 2009, Whole Foods Market, <<http://media.wholefoodsmarket.com/pr/wf/fast-facts.aspx>>.

II. Green Business

This section will give an overview of the basics of green business. Citing several manifestos that have been put out in recent years about how to “green your business” and “improve your bottom line through going green,” I will aim to identify and evaluate the driving motives and assumptions lie behind the capitalist enterprises that have chosen to adopt environmentalism into their image, consciousness, and/or production processes. A general explanation of the theory of “natural capitalism” will give background for this phenomenon and reveal the thinking behind the green business movement. I will also attempt to locate the impetus in American society for the creation of this new type of corporation—whether it comes from government, shareholders, regular citizens, or entrepreneurs. Links will be drawn between American capitalist values and the appearance of green business culture and discourse.

A. Pro Green Business

Recently, it seems that environmentalism been picked up by the mainstream. According to Paul Hawken, “Companies that are changing their ways, reducing pollution, redesigning their products and methods of manufacture, have many different motives. In some cases, they would like to escape regulatory liabilities; in others, they would like to avoid perceived or future liabilities; in yet others, they are trying to change the nature of business and move toward ‘socially responsible’ commerce.”⁵⁹ While reasons vary, one thing for certain is that business approaches to environmentalism have popularized the ideas of clean technology, cost-savings from efficiency, and green marketing as a strategy for profit-making. To green business proponents, this is an important and exciting development. According to Auden Schendler, “Of the one hundred largest economies in the world, fifty-one are corporations. More than individuals, businesses can influence policy because they carry huge weight with the government.”⁶⁰ An inevitable American reality is that national policy and culture changes incredibly slowly. As long as corporations face stakeholder and consumer willingness to support environmental

⁵⁹ Hawken, *The Ecology of Commerce*.

⁶⁰ Auden Schendler, *Getting Green Done: Hard Truths from the Front Lines of the Sustainability Revolution* (New York, NY: Public Affairs, 2009).

initiatives, Americans can continue to depend on companies to take advantage of the opportunity to turn a profit off of “going green”—or at least appearing green.

Hawken’s book *Natural Capitalism* banks on the premise that human ingenuity and will for valuable and meaningful work can be harnessed to catalyze a revolution in the way commerce is conducted. He argues that through radical resource efficiency, biological design (biomimicry), closed-loop service-based economies, and reinvestment in natural capital, businesses can simultaneously provide better goods and services, increase profits, and remediate environmental problems.⁶¹ In *The Ecology of Commerce*, Hawken insists that any business wanting to survive the next century will have to move to the “vanguard of environmental solutions” for both moral and practical reasons, setting forth the radical (yet seemingly obvious) view that environment and economy are inextricably linked. In both books, Hawken points out that even within advanced and efficient capitalist systems, everyday life relies on nature’s services that we systematically take for granted.

Other books, with titles like “The Green Corporation: The Next Competitive Advantage,” “The Bottom Line of Green is Black,” “Green to Gold,” and “The Harvard Business Review on Green Business Strategy,” emphasize the trend in corporate responsibility that has made sustainability a priority. These books give strategies for achieving the lucrative gains that are easily attainable through investment in resource and energy efficiency, reduced packaging, and green marketing. In reducing resource use and avoiding costly court cases and PR scandals, businesses not only achieve steps toward carbon neutrality but also capture revenue through decreased costs. What’s more, “green jobs” are now being touted by the Obama administration as a cure for our country’s unemployment and socioeconomic stratification, creating even more human capital for companies to access and put to use within their respective sustainability action plans.

⁶¹ Paul Hawken, Amory Lovins, and L. H. Lovins, *Natural Capitalism* (New York, NY: Little, Brown, and Company, 1999).

Chevron Corporation, among others, has recognized this reality and claimed in a recent publication that “internal conservation is a good economic decision; if the world energy supply runs out because of environmental issues or over-extraction, the business loses its business.”⁶² In doing so, it publicly recognized the importance of addressing climate change and fossil-fuel dependence, despite the longstanding resistance from fossil-fuel based companies to accepting the science and allowing for governmental regulation of greenhouse gases. Now, according to a Chevron executive, “If we become more energy efficient – not as a company, but as a country and as a globe – then that’s a great start on the reduction of carbon emissions that will go a long way to protecting our planet and the environmental concerns that we have.”⁶³

All over the globe, companies seem to be recognizing that anticipating regulation and future environmental limitations can help them to gain a competitive edge in their respective industries before others catch on. According to the literature of green business, enterprises that implement sustainable practices in preparation for policy changes will be able to invest in clean technology at their own pace, rather than when regulatory pressures force them to act. These businesses will thus establish themselves in the market before their competitors, and set examples for how profit and environmentalism can be successfully married.

B. Anti-Green Business

But there are also those who see the goals and values of corporate capitalism as *so far removed* from environmentalism that they see no feasible way to combine the two without sacrificing what is at the heart of green. Martin O’Connor argues the following:

The liberal state tends to straitjacket expression of environmental concern, and to channel it into forms that do not put in question the continued operations of corporate capitalism; thus the prospects for radical reforms lie more with the limits to the extent of hegemony of these state forms,

⁶² Media Publications, "How Chevron Makes the Most of the Energy We Have," press release, [Will You Join Us](http://willyoujoinus.com/assets/downloads/media/Chevron_Becoming%20More%20Efficient_Transcript.pdf), Apr. 2009, Chevron Corporation, <http://willyoujoinus.com/assets/downloads/media/Chevron_Becoming%20More%20Efficient_Transcript.pdf>.

⁶³ Ibid.

and with the spaces for autonomous action opened up by their fractures and internal contradictions.⁶⁴

Here O'Connor expresses concern that capitalist reforms are largely cosmetic, while environmental problems are real and need real solutions. Hawken himself admits that "Although proponents of socially responsible business are making an outstanding efforts at reforming the tired old ethics of commerce, they are unintentionally giving companies a new reason to produce, advertise, expand, grow, capitalize, and use up resources."⁶⁵ There are some practices prevalent in our culture that degrade the environment "whether the person doing them works for the Body Shop, the Sierra Club, or Exxon."⁶⁶ Hawken illustrates here the fear that the "greening" of business could be prematurely relieving our own sense of responsibility and having side effects we don't immediately hear of in the modern discourse surrounding climate change and free market responses to its challenge.

i. Scale

One critique of green business harps on the principle of economies of scale. A complex problem many green companies face is how to maintain a sustainable supply chain as production increases—in other words, how large can the scope of green business extend to without sacrificing the holistic process? This is especially relevant to food production—small local organic is just that: small and local. There are many who simply do not believe that profit-maximizing businesses will ever be able to truly call themselves environmental; that they will simply resort to making small symbolic steps while claiming to be socially responsible through marketing ploys. I will examine this concern more closely in Chapter 3A, when I delve into critiques of Whole Foods and its "corporate-organic" label, in general it is important to recognize that there are perceived tradeoffs between size and integrity in industries that aim to do good for society and the environment.

⁶⁴ Martin O'Connor, ed., *Is capitalism sustainable? political economy and the politics of ecology* (New York: Guilford P, 1994).

⁶⁵ Hawken, *The Ecology of Commerce*.

⁶⁶ *Ibid.*

ii. Greenwashing

1) *green*wash: (n) Disinformation disseminated by an organisation so as to present an environmentally responsible public image.*⁶⁷

2) *green*wash: (gr~en-wosh) -washers, -washing, -washed 1.) The phenomenon of socially and environmentally destructive corporations attempting to preserve and expand their markets by posing as friends of the environment and leaders in the struggle to eradicate poverty. 2) Any attempt to brainwash consumers or policy makers into believing polluting mega-corporations are the key to environmentally sound sustainable development*

Critics of green business also frequently cite the concept of “greenwashing.” Some businesses have caught on to the notion that there is money to be made from the “green business” niche, and have recreated their image to appear in line with environmental principles. Meanwhile, they continue polluting the environment and discounting climate ramifications from their balance sheets. Those who falsely portray themselves as “eco-friendly” are intentionally misleading citizens into thinking that they can safely consume at these places while supporting a “good cause.” Additionally, some companies portray what they are doing as far as “going green” as helping to save the environment, and maybe even restoring it to some degree. However, oftentimes what is the case is that they are not remediating but rather refraining from releasing the harmful substances that they shouldn’t, and exploiting the natural resources to a degree that they otherwise might. The distinction between remediation and mitigation is important, because in order for us to reverse some of the worrisome environmental damage we’ve done and trends we’ve unwittingly begun, we will need to restore nature’s ecosystems back to their original balance.

iii. Liberation Marketing

“The market works not only to redefine dissent, but to occupy the niche that dissident voices used to occupy in the American cultural spectrum.” – Thomas Frank

According to theorist Thomas Frank, “the proliferation of eco-labels is of a piece of the trend toward ‘liberation marketing,’ in which almost everything is sold as an expression of the consumer's sense of social justice, environmental consciousness or

⁶⁷ "Greenwash Factsheet," Corpwatch: Holding Corporations Accountable, 22 Mar. 2001, Corpwatch, <www.corpwatch.org>.

moral virtue.”⁶⁸ Liberation marketing provides a theoretical framework that can be used to deconstruct green businesses’ marketing tactics in order to see why people are feeling placated that shopping at places like Whole Foods and pumping gas at Chevron is somehow a reactionary statement against the “system.” What’s ironic is that the “system” is made up of corporate entities *like* Whole Foods, Chevron, and other “green businesses” that make their living off of people’s growing desire to consume. Liberation marketing laments that “We used to have movements for change; now we have products.”⁶⁹ If revolution can be achieved through consumerism, then American environmentalism has been completely turned on its head.

iv. Putting Dollar Values on Nature

But the most problematic aspect of green business, for O’Connor and those in his camp, is the gruesome commoditization of nature and its processes that it presents. O’Connor explains the following:

In the rhetoric of ‘greened growth’ and ‘sustainable development,’ we can observe a sinister double play around the categories of *nature/capital*, for the better legitimation of capitalist accumulation and relations of production. People are shot-gunned or seduced into conceiving of themselves as proprietors (or stewards) of themselves and their habitats as *capital* (human capital, ecological and genetic capital, tribal community assets etc.) which they may choose either to conserve or to proffer in the marketplace.⁷⁰

This notion is particularly offensive to biocentric environmentalists, who believe that all living things and systems have inherent value independent of their exploitation by humans. In the case of climate change, environmentalists must seriously consider what it would mean to create a capitalist market under which profits could be made over exploiting and trading rights to the atmosphere.

⁶⁸ Michael Pollan, "The Way We Live Now: Produce Politics," The New York Times Magazine 14 Jan. 2001, <<http://www.michaelpollan.com/article.php?id=70>>.

⁶⁹ Thomas Frank, "Liberation Marketing and the Culture Trust."

⁷⁰ O’Connor.

III. Green Business and Climate

In 2007, the Intergovernmental Panel on Climate Change (IPCC) released its fourth synthesis report warning that what we do in the next two to three years to combat climate change will determine our future. The threat of climate change is not new news, and neither is the immediacy with which we must act. Carbon offsetting, however, poses a new moral problem by presenting a way to address the harmful impacts of our consumerist actions without changing our attitudes. Many fear that by purchasing offsets we are simply using money to get rid of our guilt. The conceptual mindset that carbon offsetting and other market phenomena may engender must be examined more closely in order to further clarify the ethical and practical implications of “green” capitalism for environmentalism.

Climate change has pulled the debate over capitalist approaches to environmental problems into the 21st century. In mainstream venues of capitalist environmental discourse, carbon offsetting (a highly contested system of emissions reduction) has given us a timely model to examine through the viewpoints of green business critics. These days, you can even buy a “carbon-neutral” cell phone.⁷¹ As the environmental ramifications of climate change become increasingly well-known, a growing movement to reduce private greenhouse gas emissions has produced a wide range of voluntary climate change-mitigation strategies: everything from turning down the thermostat to going vegetarian, from buying hybrid cars to purchasing carbon offset credits for consumer goods and services through the voluntary carbon market. While mandatory market-based approaches to tragedy of the commons environmental problems have been around a long time, nothing like today’s voluntary carbon offset market has ever been seen before. The growth in the voluntary offset market shows that businesses are perceiving that they have a moral duty to make sure they mitigate their environmental impacts. But it seems unclear as to how effective, meaningful, and egalitarian their

⁷¹ "Motorola Renew is Worlds First Carbon Neutral Mobile Phone : CleanTechnica," [CleanTechnica - Technology Inspired By Nature](http://cleantechnica.com/2009/01/07/motorola-renew-is-worlds-first-carbon-neutral-mobile-phone/), 7 Jan. 2008, <<http://cleantechnica.com/2009/01/07/motorola-renew-is-worlds-first-carbon-neutral-mobile-phone/>>.

actions need to be in order to please customers, environmentalists, and advocates of social justice.

IV. Carbon Offsetting

The climate problem is global in nature and dependent upon immediate action. Those who favor business approaches are urging decision-makers to take action immediately, regardless of the skepticism projected from the camp of climate justice, while skeptics claim that the market cannot solve the very problems it created. In Vandana Shiva's book *Soil Not Oil*, she claims that carbon offsetting reflects a lack of real shift away from consumerist culture in developed countries and a convenient way of dumping the climate problem onto the third world. This section will not examine these international critiques too carefully, though they are persuasive and important, in order to focus on the national voluntary offset market. I will examine American carbon offsetting through political, cultural, philosophical and economic frameworks in an attempt to determine its significance for the greater questions of capitalism the global climate crisis. I will also address several fundamental questions and concerns that come up for offsets, such as redirected will for environmental activism, physical and psychological distance between agents and their moral responsibility, and the friend or foe debate between profit and environmental ethics.

A. What are offsets?

A carbon offset, as defined by the Clean Air-Cool Planet report, is “the act of reducing or avoiding GHG emissions in one place in order to ‘offset’ GHG emissions occurring somewhere else.”⁷² Offsets are typically measured in tons of CO₂ equivalents, and are bought and sold through a number of international brokers, online retailers, and trading platforms.⁷³ A now widely recognized and accepted measure toward “carbon

⁷² Bill Burtis and Iain Watt, "Getting to Zero: Defining Corporate Carbon Neutrality," Clean Air-Cool Planet, 2008, Clean Air- Cool Planet and Forum for the Future, <<http://www.cleanair-coolplanet.org/documents/zero.pdf>>.

⁷³ David Suzuki Foundation: Home, 28 Apr. 2009 <http://www.davidsuzuki.org/Climate_Change/What_You_Can_Do/carbon_offsets.asp>.

neutrality,”⁷⁴ carbon offsetting and brokering has emerged as an industry in the world market with competition, standards, and watchdog organizations evolving along with it. A plethora of companies offer carbon offset projects in addition to portfolios of options to choose from, and will set your business up with a carbon-reducing scheme in exchange for a price. (See Figure 1) The reasons for offsetting vary widely—everything from pandering for publicity to feeling compelled to make voluntary ethical commitments. (See Figure 3) Some businesses may answer only to their shareholders and customers, whereas others are accountable to mandatory emissions-regulation schemes such as the Kyoto Protocol. In compliance systems, such as the Kyoto Protocol, the EPA’s Emissions Trading Program and the RGGI (Regional Greenhouse Gas Initiative in the Northeastern U.S.), offsets are used as supplements to a cap-and-trade program that requires certain overall reductions in greenhouse gas emissions.

The logical premise of offsetting is that unlike most conventional pollutants, greenhouse gases (the natural and manmade primary gases that contribute to global warming) are uniformly mixed in the atmosphere such that it doesn’t really matter from the standpoint of global warming mitigation where a reduction takes place. Carbon offsets are intended to equalize radically different costs and practicalities of achieving greenhouse gas emission reductions by allowing economic transactions of credit and action. Offsetting purportedly provides an immediate and cost-effective approach for companies to address their carbon footprints (the “estimated emissions of carbon dioxide and other GHGs associated with a particular company”⁷⁵) to achieve their goal of carbon neutrality, corporate responsibility, and/or profitability. According to the organization CleanAir-Cool Planet, “If a ton of carbon has exactly the same impact on the climate system regardless of where on the planet it is released, and it costs \$100 to reduce a ton of carbon dioxide internally, yet only \$5 to reduce a ton of carbon dioxide through offsetting, then why would a company embrace the more expensive approach?”⁷⁶

⁷⁴ According to one report, “True corporate carbon neutrality means there is no net increase of atmospheric greenhouse gases from the existence of the company – or from a clearly-defined part of the company that accounts for a significant portion of the company’s overall climate impact.”

“Getting to Zero.” CleanAir-Cool Planet. <<http://www.cleanair-coolplanet.org/documents/zero.pdf>>.

⁷⁵ Burtis and Watt.

⁷⁶ Burtis and Watt.

Most environmental economists recognize that the definitions of carbon offsets are still not uniform or universally understood, such that buyers must “closely scrutinize the quality of their carbon purchases.”⁷⁷ Offsetting can occur in the voluntary or the compliance market, and a wide variety of carbon offsets can be purchased, including implementing energy-efficient technology; landfill gas capture and combustion; methane capture from animal operations; reforestation; and emissions reductions from natural gas transmission and distribution systems. According to the Offsetting Trends survey, “Demand for different types of offsets shift based on factors ranging from availability to price to public perception, and as a result business customers of the voluntary offset markets play a major role in shaping the future of carbon trading.”⁷⁸ (See Figure 4)

B. Status of the Offset Market

Whatever the motivation, the carbon offsetting industry is a growing phenomenon in the 21st century approach to climate change, and thus deserves to be studied critically in order to extrapolate data on how effective and equitable offsetting is as a practice. Voluntary carbon markets have exploded around the globe, growing nearly 350 percent in value between 2006 and 2007.⁷⁹ A Carbon Offsetting trends survey conducted last year found that “Driven in large part by business and market-based policies in the U.S., “the market for ‘over the counter’ offsets is developing and shows no signs of abating, even as the RGGI cap-and-trade initiative comes online in early 2009.”⁸⁰ The same survey, which sampled 65 large multinational corporations in a variety of sectors, found that “88% of responding companies are either offsetting/looking to offset or would consider offsetting in the future.”⁸¹ (See Figure 2) The ubiquitous adoption of offsetting

⁷⁷ Janet Peace, "An economist's perspective on the voluntary carbon market: Useful but not sufficient," Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series), by Ricardo Bayon, Amanda Hawn, and Katherine Hamilton (Minneapolis: Earthscan Publications Ltd., 2007).

⁷⁸ Carbon Offsetting Trends Survey, 2008, Ecosecurities and Climate Biz, <http://www.ecosecurities.com/Standalone/Carbon_Offsetting_Trends_Survey_2008/default.aspx>.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Ibid.

as part of a larger corporate strategy on climate change in the U.S. makes understanding the voluntary offset market all the more relevant.

Even today, with Wall Street in crisis, sales of carbon offsets have remained high, and in some cases have even been increasing. An article in the Washington Post said the following:

Experts say this is possible, in part, for economic reasons: The financial crisis has not yet reached those upper-middle-class consumers who are willing to pay \$12 to offset a cross-country flight, \$80 for a wedding or \$400-plus for a year of life. But there is also a cultural factor, the legacy of a complicated decade defined by a 'green' awakening and a national splurge in consumer spending. Many people have learned to pay to lessen their climate shame -- and, at least for now, they don't think of it as a luxury purchase.⁸²

What does this trend mean for environmentalism and the environment? With so many technological and design strategies at low costs with short payback periods, is carbon offsetting just a cop-out from implementing reduction measures at home? Why do people and companies offset? Is it cheaper? Easier? A final step in achieving carbon neutrality? In the next section, I will identify utilitarian issues, but will focus primarily on the ethical implication of such a system's existence (and prevalence) in the United States and in the world. Let's examine the debate.

C. Pro-Offsetting

There are numerous factors that lead companies to offset voluntarily. Reducing emissions at source may require long-term development, significant capital investment, and/or behavioral change, all of which take time. A company may want to upgrade all of its buildings to become more energy efficient, but not have the capital to do so all at once. Offsetting, on the other hand, "provides the short-term environmental benefits some companies seek, and is an excellent way of balancing a carbon footprint."⁸³ According to Ecorescurities (one of the world's leading organizations in sourcing, developing, and

⁸² David A. Fahrenthold, "There's a Gold Mine in Environmental Guilt," The Washington Post 6 Oct. 2008, Ecorescurities,

<http://www.ecorescurities.com/Home/Reducing_corporate_emissions/Carbon_offsetting/default.aspx>.

⁸³ Ibid.

trading emissions reductions), offsetting provides short-term environmental benefits for companies by allowing them to address carbon emissions that cannot be currently reduced by internal abatement measures alone. Once efficiency measures (typically seen as the cheapest way to eliminate emissions) have been implemented, companies can face extremely high costs to carry out technological retrofitting, shifts in management, and installment of renewable energy facilities. Though in the long run these things save money, it can be hard to justify to shareholders that they'll have to face lower returns for fifteen to twenty years until the technology begins to pay for itself. Given these restraints, carbon offsetting appears to be an ideal way to achieve cost-effectiveness and reduce the threat of global climate change simultaneously.

The ideological support for carbon offsetting stems from a belief that using the market to address environmental problems will “increase choice, create abundance, develop technology, and create ‘win-win’ situations for both buyer and seller.”⁸⁴ Proponents within the sustainable business camp argue that to make substantial and timely progress on the issue of climate change, the United States needs to recognize the political and economic realities of asking businesses to change their ways. They make the case that if the cost of mitigating greenhouse gas emissions does not fall reasonably within a company’s means, the change will not be a priority and will fall to the wayside unless a cost-effective and sensible alternative is available. Free-market advocates would take this further, arguing that in the presence of a national or state policy that *requires* a certain amount of emissions reductions, steep costs of abatement will lead some firms to break the law. To avoid generative perverse incentives and market inefficiencies, offset advocates believe in the voluntary carbon market because it provides a way for everyone to “win.”

Many argue that while they are incapable of achieving emissions at the scale of uniform emissions regulation, voluntary carbon markets are still important for addressing

⁸⁴ Ben Henneke, "A Policy Perspective on the Voluntary Carbon Market: Seeding a Real Market for Emissions Reductions," Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series), by Ricardo Bayon, Amanda Hawn, and Katherine Hamilton (Minneapolis: Earthscan Publications Ltd., 2007).

climate change. Economist Janet Peace argues that offsets can serve as a precursor to mandatory trading by “educating stakeholders (including policymakers and firms) about emission reduction opportunities, measurement tools and infrastructure requirements.” She points out that industries also benefit from learning about trading and risk management under a voluntary market because prices for offsets are lower than they would be under a mandatory system.⁸⁵ Peace goes on to explain that voluntary markets can also “act as a significant complement to any mandatory program,” and that “the general public can participate in a voluntary market to purchase offsets to cover their own GHG emissions—again further expanding the scope of trading beyond that of a mandatory programme.”⁸⁶ Essentially Peace’s argument says that voluntary carbon offsetting increases both the size of market supply as well as the degree of choice in offset projects, driving down the price of emissions reductions and allowing a broader pool of customers to participate. Offset scholar Ben Vitale agrees, asserting that “Voluntary markets have a unique role to play in heightening consumer awareness of climate change, its threats and its solutions.”⁸⁷

D. Anti-offsets

While at first glance, Hawken’s theories of creatively rearranging the way we do business in the modern world might seem to suggest that carbon offsetting is a innovative way to address the problem of market externalities, deeper consideration may actually lead to the realization that offsetting is neither as simple nor ethical as it is made out to be. The critiques directed at the carbon offsetting phenomenon and mentality are varied and numerous. (See Figure 5)

i. Additionality

⁸⁵ Peace.

⁸⁶ Ibid.

⁸⁷ Ben Vitale, "A conservationist’s perspective on the voluntary carbon market: Can it help us overcome inertia?" *Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series)*, by Ricardo Bayon, Amanda Hawn, and Katherine Hamilton (Minneapolis: Earthscan Publications Ltd., 2007).

Several categories of critiques of the carbon offset market have emerged from the surrounding discourse in the past ten or so years. The first deals with the issue of additionality, and falls within a utilitarian framework. Emissions reductions are “additional” if they occurred because of the presence of incentives associated with the existence of GHG markets, voluntary or mandatory.⁸⁸ Proving additionality is often the most complicated part of generating a carbon offset. Determining whether the activity in question is business as usual or happening as a result of the commodity value of the carbon offsets is a murky and imprecise process.⁸⁹

But additionality, despite its difficulty to ascertain, is crucial to the efficacy of any offsetting market, and cannot be ignored. According to blogger Andrew Winston, a frequent critic of the carbon offset market, “you ideally want something that is measurable and legitimately reduces the amount of carbon going into the atmosphere...you don't want to pay people for things they're already doing.”⁹⁰ The worrisome news is that in 2006, a study in India conducted by an adviser to the CDM executive board (which regulates offsets under the Kyoto Protocol), “conservatively estimated that one-third of all projects failed to be ‘additional’.”⁹¹ If most projects are not contributing legitimately to the reduction of greenhouse gases in the atmosphere, a whole lot of money is being spent on standing still. Though the recognition and publicity of these problems have led to more and more companies coming out in an effort to bring offsetting under a measurable protocol of standards (See Figure 6), the global nature of the carbon offsetting industry has made a uniform system of verification for offset projects difficult to implement and enforce.

ii. Transparency and Inconsistency

⁸⁸ Burtis and Watt.

⁸⁹ Mark Trexler, “Renewable Energy Certificates to carbon offsets: What’s the right exchange rate?” *Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series)*, by Ricardo Bayon, Amanda Hawn, and Katherine Hamilton (Minneapolis: Earthscan Publications Ltd., 2007).

⁹⁰ Andrew Winston, “Do Quality Offsets Exist?” weblog post, *Finding the Gold in Green*, 14 Oct. 2008, <<http://www.andrewwinston.com/blog/>>.

⁹¹ Kevin Smith, “Offset Standard is off its Target,” 3 Apr. 2008.

Lack of transparency and consistency have also raised doubts about whether or not offsetting efforts are benefiting the environment. Specifically, people are unsure that the reduction credits being bought and sold on these markets are legitimate. Credibility is difficult to come by because of the wide number of offsets being offered on the market. Prices are drastically different amongst offset credits, which may result in perverse rewards for projects that are not actually deserving. Renowned Indian environmentalist and eco-feminist Vandana Shiva cites the example of the Bunge Corporation, a corporation that supplies feed to factory farms and emits massive amounts of methane into the atmosphere. Under the carbon market, however, it has begun receiving carbon “credits” for methane recapture, leading Shiva to argue that the economic benefits of the carbon market are often distributed to undeserving parties. Though Bunge turns a profit by reducing the net amount of greenhouse-gases in the atmosphere (which by the way it put there in the first place) and selling its credits, it also continues to pollute water, pay low wages, and reduce seed biodiversity. Meanwhile, farms like Niman Ranch (free-range, local, etc.) that have limited their emissions since their inception get nothing because pollution credits are distributed based on reductions from historical emissions.

iii. Redirected Will

There are some who believe that carbon offsetting, beyond its problematic technical workings, will actually accelerate climate change because of the weighty negative influence it has on people’s desire to change their behavior and consumption patterns—the true drivers of anthropogenic climate change. If the benefits of cumulative offset projects around the world are outweighed by renewed private incentive to increase greenhouse-gas causing activities (since the guilt is gone and there is a way to consume, travel, and conduct business “carbon-neutrally”), then the net result is a cost to society and to the stability of the globe’s climate. As Hawken explains, “the problem isn’t the half measures but the illusion they foster that subtle course corrections can guide us to a good life that will include a ‘conserved’ nature and cozy shopping malls.”⁹²

⁹² Hawken, *The Ecology of Commerce*.

This category of offset criticism denotes the fear that carbon offsetting reflects and perpetuates consumerist culture and doesn't require real change. In fact, it may be distracting from better actions businesses (and the U.S. at large) could be taking to address climate change. "Experts who study offsets say a cultural shift is at work, in which the American public has become accustomed to feeling guilty about climate change, and, instead of writing letters to members of Congress or donating to an environmental group, they have learned to buy their way out."⁹³

If people and companies are spending their time, effort, and money on emissions reductions that are more imaginary than real, but still feeling good about going on with their business because they've "taken action," then what happens to the time and energy they could have spent pursuing *actual* climate change mitigation? Moreover, voluntary carbon markets could actually be encouraging the illusion that climate change can be stopped by symbolic individual actions, and not through political and economic structural change. A mentality of growth cannot be offset by even the biggest forest carbon sequestration project. According to Oilwatch, "The voluntary carbon market further increases the power of the big polluters to carry on business as usual while clearing the conscience of consumers."⁹⁴

iv. Other Externalities

Finally, carbon offsets do not address the non-climate related externalities associated with the consumption of fossil fuels. Mining, dependence on foreign oil, and the ecological destruction that comes from building roads and drilling for oil are also by-products of fossil-fuel reliance and are incredibly harmful to the environment and human health. A commonly ignored externality is depicted by Vandana Shiva in the following:

Disposability of people is built into the denial of food to millions as well as the destruction of rural livelihoods by the substitution of human energy with machines powered by fossil fuels. The very definition of productivity in the industrial paradigm is labor productivity, i.e., the fewer human beings involved in production, the more 'productive' a process is, even if

⁹³ Fahrenthold.

⁹⁴ "Oilwatch Position on Voluntary Carbon Market," [Carbon trade watch](http://www.carbontradewatch.org/index.php?option=com_content&task=view&id=206&Itemid=36), 9 Sept. 2008, <http://www.carbontradewatch.org/index.php?option=com_content&task=view&id=206&Itemid=36>.

it uses more energy and more resources and produces less per unit of energy and resource inputs.⁹⁵

Because of this, Shiva argues that we have two choices. We can “make a nature-centered, people-centered transition to a fossil-free future, or we can continue on our current path toward a market-centered future, which will make the crisis deeper for the poor and the marginalized and provide a *temporary* escape for the privileged.”⁹⁶ Although greenhouse gases may be uniformly distributed pollutants, they cannot be separated from the industrial activities that produce them. These same activities (burning of fossil fuels for transportation, production, etc.) come with serious pollution externalities that do not have the fortunate feature of having uniform effects no matter where they are emitted.

American dependence on foreign oil is too dangerous to not address as we address climate change. The forces happening in the world are pushing us toward a tipping point, and we seem to be involved in constant political disputes in the Middle East to maintain control over oil resources. Our economy depends on it—if we let Barack Obama truly change the course that has been set for him in foreign policy by his Big Oil predecessors, we would instantly regret it because our financial system and banks would go down the tube. We’ve forgotten how to succeed and meet our material needs without relying on globalization and corporate capitalism. This is why we are so narrow-minded in our approaches to environmental remediation and climate change mitigation—we have forgotten how to do things without the market to do it for us. Market strategies like carbon trading and offsetting may do a fine job of keeping our economy stable while putting a band-aid on the problem, but what about the greater problem of our energy independence? What about the problem of drained resources from constant warfare and a fear-driven need for national defense through weaponry? These are the issues that environmentalists with social consciences want to see addressed.

v. Offsetting Wrap-Up

⁹⁵ Shiva, 2.

⁹⁶ Ibid.

So displacing carbon emissions actually is not as harmless as it may seem. Offsetting does not get to the root cause of environmental problems. Why not make policies and business action plans that are comprehensive rather than piecemeal? Why rely on an atomizing, reductionist approach?

In the Preface to *Ecology of Commerce*, Hawken describes the awakening he experienced at an award ceremony where his company was being honored for its environmental initiatives. He explains that despite the good efforts his company truly had made in the name of the environment, “What we had done was scratch the surface of the problem, taken a few risks, put a fair amount of money where our mouths were, but, in the end, the impact on the environment was only marginally different than if we had done nothing at all.” This is exactly what critics are afraid of with respect to carbon offsetting: the possibility that we are merely taking a few risks, putting money where our mouths are, and hardly changing anything at all is too risky for the urgency of climate change and its implications on our natural world, and consequently the economic and social systems upon which we depend.

The most dangerous thing about offsetting is the growth mentality it allows businesses to hold onto. Because everything we do now that has a carbon footprint can be “negated” through offsetting strategies, where is the impetus to reduce corporate expansion in the first place? As Hawken points out in *Ecology of Commerce*,

This counter myth of ‘no limits’ is so powerful that it appears ironically to be gaining ground, in a reflexive, psychological reaction of denial, even as knowledge of the carrying capacity of the Earth becomes more evident. Ever-expanding abundance is not a theory based on science, or history, or nature. It is based solely on self-interest. Whether willfully ignorant or unabashedly hypocritical, at some point we must ask business to look candidly at the real world and see the skull and crossbones posted alongside ecological pathways, so that we can begin to create real solutions instead of illusory techniques of evasion.⁹⁷

⁹⁷ Hawken, *The Ecology of Commerce*, 33.

If we are to heed Hawken’s warning, we will need to be cautious of strategies that fall under the category “illusory techniques of evasion” and instead search for creative methods with which to limit consumption and production.

V. Conclusion

Not only is the cultural *process* of environmental remediation and stewardship ignored through utilitarian market approaches, but we may also face the difficulty of finding out that we’ve solved one problem only to have exacerbated, ignored, or perpetuated one hundred others. We must look at the big picture and create a comprehensive and revolutionary strategy if we truly want to fix the environmental and economic ills of our time. Hawken explains that although some corporations are dramatically reforming business practices with respect to the environment and social responsibility, there is still a yawning gulf between the kind of friendly ‘green’ environmentalism that business wants to promote—one that justifies growth and expansionary use of resources—and the kind that actually deals with the core issues of carrying capacity, drawdown biotic impoverishment, and extinction of species. “Business, despite its newly found good intentions with respect to the environment, has hardly changed at all.”⁹⁸

END OF CHAPTER 2.

⁹⁸ Ibid.

FIGURES

Figure 1

Structure of the Offset Market⁹⁹

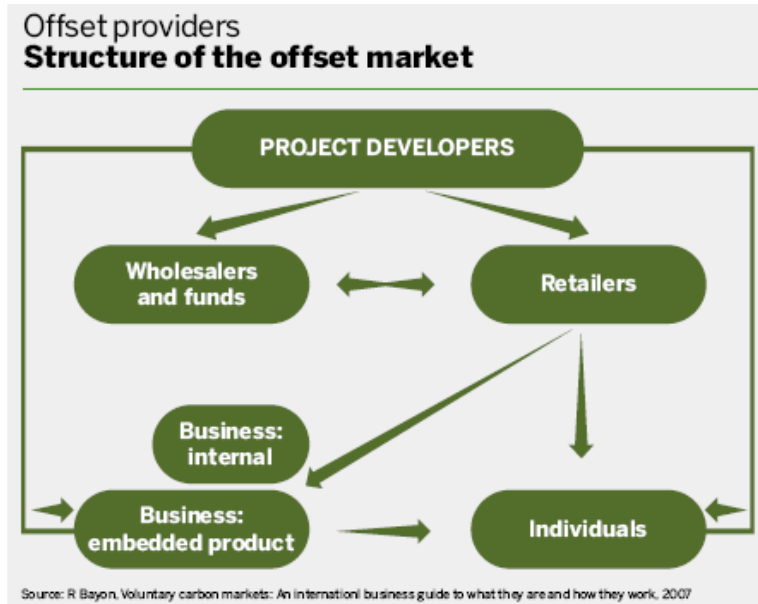
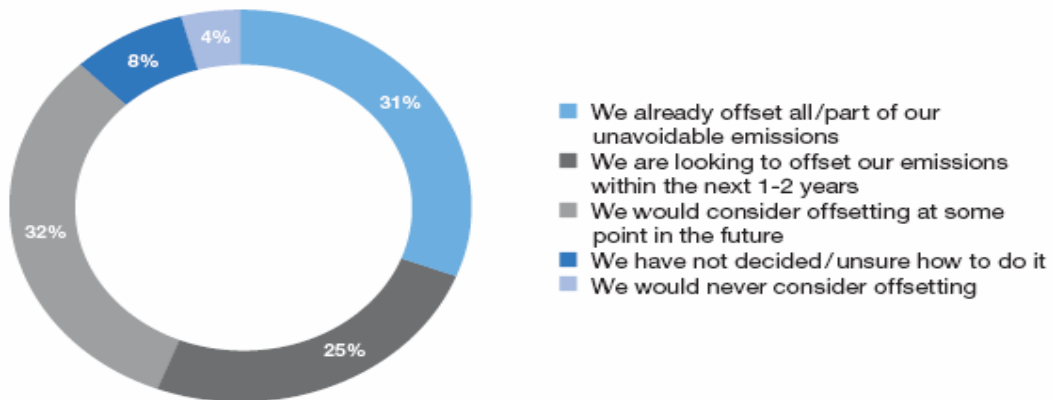


Figure 2

Carbon Offsetting Trends Survey¹⁰⁰

What do you believe is your company's attitude towards carbon offsetting?



⁹⁹ Ricardo Bayon, Amanda Hawn, and Katherine Hamilton, Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series) (Minneapolis: Earthscan Publications Ltd., 2007).

¹⁰⁰ Carbon Offsetting Trends Survey, 2008, Ecosecurities and Climate Biz, <http://www.ecosecurities.com/Standalone/Carbon_Offsetting_Trends_Survey_2008/default.aspx>.

Figure 3

Motives for Corporate Offsetting¹⁰¹

1. To save money/ reduce operating costs

By voluntarily calculating and assigning a cost to carbon emissions, companies can begin to prepare for the inevitability of an economy in which carbon dioxide and other greenhouse gases are regulated and taxed. A very effective way of reducing emissions is by being more energy efficient. A positive by-product of this is that you also reduce your energy bill which saves money, particularly in the context of high energy /oil prices;

2. Corporate Social Responsibility (CSR)

Carbon management and offsetting is often a complementary aspect of a wider CSR strategy, especially if the projects which are invested in reflect the locations of a company's operations and give something back to the surrounding communities;

3. Leading by example

Companies wishing to influence and drive emissions reductions amongst peers faster than the current pace of legislation often take a stand and publicise their carbon management and offsetting scheme;

4. Demand from stakeholders

Shareholders may want to see carbon reducing efforts/offsetting or employees who are motivated by working for a socially responsible company influence organisations choosing carbon neutrality or similar;

5. Compliance

There are some companies who in future may be part of the EU Emissions Trading Scheme who have caps on their emissions. These companies could be entitled to reduce their overall emissions by procuring offsets, and therefore may choose to act in the voluntary market to learn more before being under a compliance regime. Also many buyers (particularly in the US) purchase offsets as a hedge against future compliance risk, for example, they are expecting that the offsets they buy will be recognised under a future compliance scheme and can therefore be used to meet a compliance target or sold to another compliance party;

6. Green marketing/ boosting green and socially responsible credentials

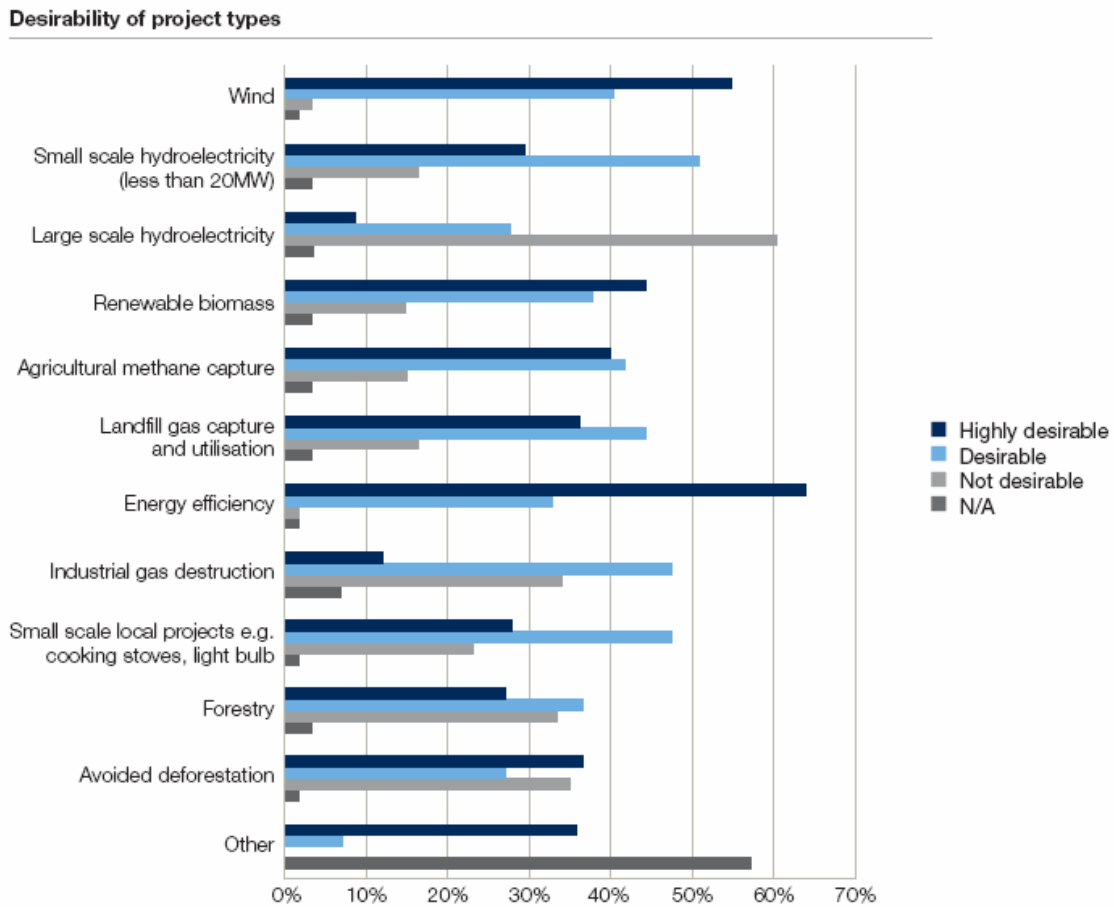
Developing carbon neutral products or services can help companies to reach new customers who increasingly care about the environmental impact of products and services that they buy. Going carbon neutral can send a powerful message to consumers, competitors and the public that you share their concern over climate change, are taking steps today to neutralise your emissions and that by buying from, investing in or promoting your business the public at large can help combat climate change;

7. Reputational and commercial risk

¹⁰¹ Carbon Offsetting Trends Survey, 2008, Ecoscurities and Climate Biz, <http://www.ecosecurities.com/Standalone/Carbon_Offsetting_Trends_Survey_2008/default.aspx>.

More and more, companies that do nothing with regards to climate change are publicly criticized and investors have also started taking into account companies environmental footprints when valuing stock. Therefore for some companies, it is too much of a risk not to be taking steps to address climate change due to both the commercial consequences as well as the risk of negative public opinion.

Figure 4
Desirability of Offset Project Types¹⁰²



¹⁰² Carbon Offsetting Trends Survey, 2008, Ecoscurities and Climate Biz, <http://www.ecosecurities.com/Standalone/Carbon_Offsetting_Trends_Survey_2008/default.aspx>.

Figure 5

Common Critiques of the Offset Market¹⁰³

- The carbon market ignores the key issue of fossil fuel dependency.
- It benefits the polluters.
- It privatizes conservation and environmental initiatives.
- It fails to remedy climate injustice, by further increasing wealth and wellbeing in the North, while increasing vulnerability in the South through the implementation of projects that may violate rights.
- It does not recognize the existence of a historical and current environmental debt.
- What is paid for now is speculative future absorption, while the emissions have already been produced.
- It divides up the atmosphere, converts the carbon cycle into a commodity, and places it in private hands, along with new rights in air, wind, land, forests and water.
- It privatizes responsibility for the climate, conservation and environmental initiatives.
- It is a way of selling environmental services which would mean in effect the alienation of many rights of use of lands and territories currently exercised by their occupants.
- It violates the rights of local communities and provokes negative impacts on the environment.
- It is speculative and capricious.
- Its mechanisms are based on capitalist principles, the main cause of climate change.
- It will worsen climate change instead of curbing it, because emissions will continue to increase.
- It cannot be subject to effective state control.
- It assumes that changes will result from individual actions, and not through structural policies and decisions, when the solution is not a matter of consumer choices, but rather of actions to correct inequality, injustice and exploitation.
- It uses deceptive advertising to fool consumers.
- By leading people to believe they are compensating for their current lifestyle, it encourages the continuation of unsustainable patterns of consumption.

¹⁰³ "Oilwatch Position on Voluntary Carbon Market," [Carbon trade watch](http://www.carbontradewatch.org/index.php?option=com_content&task=view&id=206&Itemid=36), 9 Sept. 2008, <http://www.carbontradewatch.org/index.php?option=com_content&task=view&id=206&Itemid=36>.

Figure 6

Offset Verification Criteria.¹⁰⁴

Complete Eligibility Criteria: To be eligible for inclusion in The Carbon Offset List, emission reductions must meet the following criteria:

1. Only direct emission reductions are eligible. (not REC's or other indirect)
2. The quantification of emission reductions must be reliable and accurate.
3. The permanence (or limitations on permanence) of emission reductions must be clearly explained and justified.
4. The emission reduction project's start date and timeframe must be clearly defined.
5. An offset provider must demonstrate clear ownership of the claimed emission reductions.
6. Emission reductions must be serialized and tracked to assure that offsets are not double counted or resold after retirement.
7. All claims should be independently verified and verifiable.
8. The emission reductions should be generated in ways that produce net positive environmental and community impacts.

¹⁰⁴"Complete Eligibility Criteria - Innovation Exchange - Environmental Defense Fund," Environmental Defense Fund - Finding the Ways That Work, Environmental Defense Fund, <<http://www.edf.org/page.cfm?tagID=24880>>.

Chapter 3A: Case Study

Whole Foods

Findings within the Industry

“The companies that are changing their ways, reducing pollution, redesigning their products and methods of manufacture, have many different motives. In some cases, they would like to escape regulatory liabilities; in others, they would like to avoid perceived or future liabilities; in yet others, they are trying to change the nature of business and move toward ‘socially responsible’ commerce.”¹⁰⁵

– Paul Hawken

“To extend our love and care beyond our narrow self-interest is antithetical to neither our human nature nor our financial success. Rather, it leads to the further fulfillment of both. Why do we not encourage this in our theories of business and economics? Why do we restrict our theories to such a pessimistic and crabby view of human nature? What are we afraid of?”

– John Mackey

Guiding Questions:

- 1) What are the ethical and practical implications of carbon offsetting within the food industry, particularly within corporate enterprises such as Whole Foods Markets? (A critical look at carbon offsetting within the food industry). What are the implications for business? For science and climate? For ethics and human experience?
- 2) What is the impetus for most companies deciding to offset their carbon emissions? For Whole Foods?
- 3) How do businesses tend to prioritize offsetting within a larger approach to sustainability? How prevalent is offsetting used as a means of “greenwashing” and how often is it used appropriately as a tool for reaching carbon neutrality? Whole Foods?
- 4) What are the metrics they use to measure the effectiveness of such an investment? How does their approach line up with their environmental mission statement?
- 5) Why has Whole Foods been able to maintain such a positive public image given that much of American organic history/culture has been anti-big, all about the small farmer (Jeffersonian) and small plot of land, the small store, etc? How has it maintained an image of environmentalism and "fairness" while being so big and corporate?

I. Introduction

“The shopping mall and the supermarket are temples of consumerism through which global corporations seduce us into participating in the destruction of our productive capacities, our ecological rights, and our responsibilities as earth citizens.”¹⁰⁶

– Vandana Shiva

¹⁰⁵ Hawken, *The Ecology of Commerce*.

¹⁰⁶ Shiva.

As outlined in Chapter 1, the food industry plays a significant, complex, and interdependent role in the United States' contribution to climate change that is frequently ignored by American mass media.¹⁰⁷ But in the past year, nearly three-quarters of food retailers surveyed by the publication "Supermarket News" said they have reduced the consumption of electrical energy in their stores.¹⁰⁸ This trend indicates recognition of the link between the American agriculture and food system and climate change on the part of food retailers, as well as a concerted effort to address their own emissions.

This chapter is about Whole Foods and its approach to reducing the American food system's contribution to climate change and fossil-fuel dependence. It will examine where the company's motives for environmental responsibility come from, what kinds of Renewable Energy Credits it buys (and how they differ from or are similar to traditional offsets), and what factors went into the decision to purchase them. I will also examine how, if at all, this model lends itself to Paul Hawken's ideas of "natural capitalism" and how it may fall short of Hawken's expectations. In examining Whole Foods' purchase of carbon offsets, I aim to highlight the pros and cons of offsetting with respect to the food industry, and to present marketplace realities facing a company that truly cares. To give context for the REC purchase, I will move through a brief history of the company before examining what Whole Foods may have lost in becoming large and corporate.

I will also point out what Whole Foods does that sets it apart from other companies, identify its strategies and approach to eliminating greenhouse gas emissions and dependence on fossil fuels. Why is Whole Foods taking real action whereas others are just greenwashing? At the same time, I will argue that Whole Foods loses a bit of integrity by failing to meet its stated mission of "caring about communities" through perpetuating patterns and practices that allow for inequality in access and participation. The larger goal is to answer the question: Does idealism "put the brakes on business?" What problems remain to be solved?

¹⁰⁷ Chan, Neff, and Smith.

¹⁰⁸ Michael Garry, "Retailers Cutting Energy Use in Stores," Supermarket News Online 3 Mar. 2009, <<http://supermarketnews.com/technology/retailers-energy-0323/>>.

II. Background and History

“Back in 1980, we started out with one small store in Austin, Texas. Today, we’re the world’s leader in natural and organic foods, with more than 270 stores in North America and the United Kingdom.” – Official Whole Foods Market Website

To better understand Whole Foods Market and its corporate mission, it is crucial to go back in time to the store’s founding and follow the ethic/mission as it progressed from small to big, up to the point where it decided to “offset” 100% of its in-store electricity use. This will also help us to contextualize the critiques to be discussed in this chapter, and hopefully help us to draw better conclusions about the ethical and practical implications of carbon offsetting in the corporate food sector.

A. History

Despite its current perceptions as a Fortune 500 company with pricey produce and a trendy website, Whole Foods started out as a mom and pop grocery store in Austin, Texas before there existed any chains for folks who wanted to eat healthily for their bodies and for the planet. “With \$45,000 borrowed from friends and family, Mackey and then-girlfriend Renee Lawson Hardy opened a tiny natural-food store in a three-story house in Austin, Texas. At the time (the late ’70s), natural and organic foods had a very small cult following.”¹⁰⁹ Mackey was a college-dropout and Hardy was only 21 years old—they lived in their store and bathed in their dishwasher to save money. A few years later, Mackey and Hardy—whose store was then called Safer-Way, a play on “Safeway”—paired up with Craig Well and Mark Skiles of Clarksville Natural Grocery to test out the supermarket configuration in the natural foods industry, which up until that point relied primarily upon small family markets. The resulting “Whole Foods Market” opened in 1980 with a staff of only 19 people. It was an immediate success, despite that at the time, there were less than half a dozen natural food supermarkets in the United States.¹¹⁰

¹⁰⁹ Brenna Fisher, "From the Corner Office- John Mackey," Success Magazine Online, <<http://www.successmagazine.com/From-the-Corner-Office-John-Mackey/PARAMS/article/560/channel/19>>.

¹¹⁰ "Our History | WholeFoodsMarket.com," Whole Foods Market: Natural and Organic Grocery, 28 Nov. 2008 <<http://www.wholefoodsmarket.com/company/history.php>>.

After only four years, Whole Foods began to expand. It added locations in Houston, Dallas, and New Orleans before reaching the West Coast in 1989. Through mergers and acquisitions of other natural food chains in the 1990's, the company was able to grow rapidly. (See Figure 2) After going public in 1992, Whole Foods purchased the popular Bread & Circus chain, a Boston-based company, thus forming an alliance that Mackey credits for the following sixteen years of growth.¹¹¹ By the late 1990s, Whole Foods could no longer rely solely on small, scattered independent farms to source its stores. As a large supermarket, it needed central infrastructure and a dependable supply chain. By 2003, it was the largest natural and organic supermarket in the world, having reached Canada in 2002 and the UK in 2004.¹¹² In 2005, the company broke onto the Fortune 500 list, and a year later Wal-Mart and other large stores entered the market and began to compete with Whole Foods by offering organic options next to their traditional food products.¹¹³

As of last year, Whole Foods was still growing. By November of 2008, 66 new store leases had been signed and Whole Foods had grossed \$8 billion in sales for the year, raking in \$1.8 billion in the fourth quarter of 2008 alone.¹¹⁴ These impressive figures, along with its growing list of initiatives for environmental-retrofitting and “animal-friendly practices,” hint that there are no signs of slowing down despite the recent economic downturn. Whole Foods has something that isn't going away.

B. Keys to Success

“Having a strong purpose and mission attracted a lot of idealistic people who probably wouldn't have worked for a traditional grocery store.” – John Mackey

¹¹¹ Fisher.

¹¹² "Our History | WholeFoodsMarket.com," Whole Foods Market: Natural and Organic Grocery, 28 Nov. 2008 <<http://www.wholefoodsmarket.com/company/history.php>>.

¹¹³ Nancy F. Koehn and Katherine Miller, "John Mackey and Whole Foods Market," Harvard Business School (2007).

¹¹⁴ Fisher.

In the course of three decades, how did Mackey turn a single natural food store into a coast-to-coast, multibillion-dollar food retailing trendsetter? To explain Whole Foods' success, it is useful to examine the following excerpt:

A survey of 1,500 people in eight Midwestern states, Seattle, and Boston reported that more than 75% would choose food labeled 'grown locally by family farmers' as their first choice for produce or meat. 'Grown locally-organic' was the second-highest choice, though the researchers said it might have come in first had the words *by family farmers* been added. About 25 percent said they would pay a premium of 6 to 15 percent for food from small local farms.¹¹⁵

Ethical eating has clearly become important to Americans, and climate change has managed to finally raise awareness in the mainstream about the social and environmental ramifications of our industrial food system. Climate affects every aspect of our society, and Whole Foods has aided and capitalized upon the public's knowledge of this reality.

In addition to a demand for local and organic food, there has been an undeniable *cultural* attraction to Whole Foods stemming from its alternative feel—the store milieu offers community bulletin boards, massage tables out front, and adorable names for its frozen chickens like “Rocky” and “Rosie.” What’s more, CEO John Mackey has stayed with his company all along, maintaining the environmental ethic and keeping customers clued in about his current state of mind through a blog and public exchanges. This style of committed environmental leadership is attractive to Whole Foods shoppers, and according to environmental columnist Christina Inge, “Having a strong corporate philosophy that emphasizes key sustainability concepts is vital to staying green during periods of growth.”¹¹⁶ Moreover, analysis of the Whole Foods managing style has discovered the following:

Fresh thinking led to the creation of an idealistic workplace that allows employees to basically run their own stores and teams almost independently from corporate. As long as employees meet Whole Foods' overall mission to sell the highest-quality organic food and improve people's well-being, there is no need for interference. And since stores are staffed by individuals who are downright obsessed with everything from

¹¹⁵ Fromartz.

¹¹⁶ Christina Inge, "Growing a Green Business Without Compromise | GreenBiz.com," [GreenBiz.com - Daily News on Green Business, Business and Climate Change and Sustainable Business Practices](http://www.greenbiz.com/feature/2008/09/08/growing-green-business-without-compromise), 8 Sept. 2008, <<http://www.greenbiz.com/feature/2008/09/08/growing-green-business-without-compromise>>.

hormone-free milk to homeopathic remedies, that mission is deeply rooted in the company culture.¹¹⁷

The cultural appeal of the workplace model has lead a Whole Foods executive to quip that “Mackey is hardly a manager at all... he’s an anarchist.”¹¹⁸ This perception of Whole Foods as a countercultural force is important to the cultural theory of “liberation marketing,” which will be discussed in detail later in the chapter.

III. Current Status

A. CEO John Mackey

“Mr. Mackey has lived on a vegetarian co-op, he and his wife, Deborah, both practice meditation and yoga, and spend as much time as they can on their 720 acre ranch west of Austin.”¹¹⁹

John Mackey, founder and CEO of Whole Foods Market, says that “There's no inherent reason why business cannot be ethical, socially responsible, and profitable.” A self described libertarian vegan, Mackey insists on infusing traditional business models with an ecological consciousness and believes strongly that given the option to purchase ethically-produced foods, customers will vote with their dollars to support green businesses like his own. By studying Mackey, a highly controversial figure (most recently for the scandal of him writing undercover on financial message boards to bash Whole Foods’ former rival Wild Oats as a bad business not worth its stock price), the profound link between Whole Foods Market Corporation and the philosophy of a symbiotic relationship between business and environmental stewardship becomes apparent.

Mackey explains that “the business model that Whole Foods has embraced could represent a new form of capitalism, one that more consciously works for the common good instead of depending solely on the invisible hand to generate positive results for

¹¹⁷ Fisher.

¹¹⁸ Koehn and Miller.

¹¹⁹ John Arlidge, "Peace, Love, and Profit- Meet the World’s Richest Organic Grocer," The Observer 29 Jan. 2006, <<http://observer.guardian.co.uk/foodmonthly/story/0,,1694454,00.html>>.

society.”¹²⁰ In his quest to prove that corporations do not have to be greedy, selfish, or uncaring, Mackey has striven to “create value” for all of his company’s constituencies, supposedly allowing “customers, employees, suppliers, and the community to define the purpose of the business in terms of its own needs and desires.”¹²¹ Rather than answering to the status quo, Mackey—who has directed the company’s moral compass since its inception in 1980—seems to be deeply committed to influencing the national economy/market in a way that is inspirational, progressive, and proactive.

B. Self-Reported Info and Values

“Whole Foods Market’s co-founders created the original purpose of the company in 1980, but the interdependent stakeholders have evolved it over the years. We started with a few simple ideals and core values for the company and then created very simple business structures to help fulfill those ideals. However, over time as the company grew a process of self-organization took place and layers of organizational complexity evolved year after year after year to fulfill the original core values. As the original core values were expressed over time, deeper meanings of those core values were discovered and/or created by the interdependent stakeholders. Whole Foods Market’s purpose has become deeper, richer, and more complex as it has evolved over the years.”¹²² – John Mackey

In terms of corporate self-reporting, Whole Foods infuses environmental and social values beyond its mission statement, and exceeds the normal expectations for a green business. (See Figure 1) Its listed core values include concepts like “sustainable agriculture,” “wise environmental practices,” “community citizenship,” “transparency,” “education,” and “integrity in all business dealings.” The corporate website admits its capitalist nature by publicly asserting that “profits are essential to creating capital for growth, prosperity, opportunity, job satisfaction and job security,” but simultaneously recognizes its responsibility to actively participate in local communities. Whole Foods does this by committing a minimum of 5% of its annual profits to a “wide variety of community and non-profit organizations.”¹²³ Though this type of philanthropic gesture is

¹²⁰ Koehn and Miller.

¹²¹ Ibid.

¹²² John Mackey, "Conscious Capitalism: Creating a New Paradigm for Business," weblog post, The CEO's Blog, 9 Nov. 2006, 14 Mar. 2009
<<http://www2.wholefoodsmarket.com/blogs/jmackey/2006/11/09/conscious-capitalism-creating-a-new-paradigm-for-business/>>.

¹²³ "Our Core Values | WholeFoodsMarket.com," Whole Foods Market: Natural and Organic Grocery, <<http://www.wholefoodsmarket.com/values/corevalues.php>>.

not directly profitable for the company, Mackey's seems to ensure that benefits derived from corporate sales are re-distributed in a way that projects the vision of a more egalitarian society while still maintaining a successful business operation. Simultaneously, this initiative makes Whole Foods look good to its environmental and social-justice minded customers and investors.

C. Programs and Initiatives

Whole Foods has undertaken quite a number of significant on-site energy-saving measures. In 2007, it joined the EPA's GreenChill Advanced Refrigeration Partnership, a voluntary program that aims to reduce the usage and leakage of supermarket refrigerants that impact either the ozone layer or climate change.¹²⁴ Additionally, Whole Foods stores around the country have incorporated energy-efficient design such as the new LEED supermarket in Lakewood area of Dallas. The company also has solar panels to generate renewable-based electricity at five stores in California, including the Berkeley location, and New Jersey and just opened a distribution center in Connecticut that has the largest solar roof in the state. Stores from several regions supplement the wind credit purchase with power from solar panels and power generated by biomass.¹²⁵ In Colorado and New Mexico, Whole Foods Market is 100 percent green-powered.¹²⁶ In Chicago, Whole Foods has a LEED Gold certified store.¹²⁷ The Dedham store will be the first supermarket in Massachusetts to generate nearly 100 percent of its electricity and hot water onsite with an ultra-clean 400 kilowatt-hours (kWh) fuel cell. Less than a week ago, the company announced a comprehensive commitment to renewable energy by adding solar installations to twenty more stores—in effect tripling the number of stores

¹²⁴ Michael Garry, "Retailers Cutting Energy Use in Stores," Supermarket News Online 3 Mar. 2009, <<http://supermarketnews.com/technology/retailers-energy-0323/>>.

¹²⁵ "Our Core Values." Whole Foods Market Website.

¹²⁶ "Whole Foods Market Wins Environmental Protection Agency 2006 Green Power Partner of the Year Award," Whole Foods Market: Natural and Organic Grocery, 7 Dec. 2006, <<http://www.wholefoodsmarket.com/pressroom/2006/12/07/whole-foods-market-wins-environmental-protection-agency-2006-green-power-partner-of-the-year-award/>>.

¹²⁷ Kathy Loftus, "Re: Share Your Ideas: Keep Earth Day Going," weblog comment, 24 Apr. 2009, <<http://www.wholefoodsmarket.com/live/>>.

with solar panels, and retrofitting existing stores with the most efficient lighting, equipment, and mechanical components.¹²⁸

Outside of the stores themselves, the company is currently in the process of fitting its truck fleet with technologies to reduce wind-resistance and minimize fuel consumption, implementing systems that allow the engine to be turned off completely during loading and delivery to avoid idling emissions, and converting it to biodiesel fuels.¹²⁹ Whole Foods has a comprehensive and successful waste reduction program that has enabled many regions to eliminate 80% of their waste through composting and recycling.¹³⁰ According to Kathy Loftus, the new guru of energy management within Whole Foods, reducing food waste through composting and conversion to biofuel is crucial to addressing climate change. She says:

There is clear evidence that food waste and other organic materials, when buried in landfills, are primary contributors to the emissions of methane, one of the most potent of the greenhouse gases contributing to global warming. So not only does our food “waste” become an agricultural soil amendment that is vital to the production and maintenance of healthy soil and plants, but by preventing it from getting into landfills, we’re avoiding a significant amount of methane from entering the atmosphere. And, using compost also reduces or even eliminates the need for fossil fuel-based pesticides.¹³¹

In addition to compost and recycling, Whole Foods has sponsored responsible packaging forums, banned plastic bags and polystyrene from supplier packaging, provided food in bulk so as to eliminate packaging waste, and is developing a bio-fuel program for a generator that runs off the cooking waste used in 21 stores across the Northeast region—diverting over 1,200 gallons of cooking oil a week from landfills and using it to fuel a system that “reduces our dependency on conventional fossil fuel sources

¹²⁸ "Whole Foods Market® Announces Alternative Energy Investment, Energy Savings with New Store Designs, Existing Store Retrofits," press release, Whole Foods Market Pressroom, 21 Apr. 2009, <<http://www.wholefoodsmarket.com/pressroom/2009/04/21/whole-foods-market%C2%AE-announces-alternative-energy-investment-energy-savings-with-new-store-designs-existing-store-retrofits/>>.

¹²⁹ "Our Core Values." Whole Foods Market Website.

¹³⁰ Kathy Loftus, "From Trash to Treasure," weblog post, Whole Story: The Official Whole Foods Market Blog, 13 Jan. 2009.

¹³¹ Ibid.

and results in less harmful emissions.”¹³² Wasting impacts climate change because it is linked to global resource extraction, transportation, processing, and manufacturing. “Landfills are the largest source of anthropogenic methane emissions in the U.S., and the impact of landfill emissions in the short term is grossly underestimated — methane is 72 times more potent than CO₂ over a 20-year time frame.” Incinerators release more CO₂ per megawatt-hour than coal-fired, natural-gas-fired, or oil-fired power plants. According to the organization Stop Trashing the Climate, “When we minimize waste, we can reduce greenhouse gas emissions in sectors that together represent 36.7% of all U.S. greenhouse gas emissions.”¹³³

Whole Foods Market is also developing an inventory of scope 1 and 2 greenhouse gas emissions, which will help track and report natural gas and electricity consumption, refrigerant leaks and trucking fleet emissions.¹³⁴ For these commitments, among others, Whole Foods received the EPA Green Power Leadership Award in 2004 and 2005 and Green Power Partner of the Year award in 2006 and 2007.¹³⁵ Just this month it added the Natural Health Magazine Green Choice Award for 2009.¹³⁶

D. Carbon Emissions and Responsibility

Whole Foods is widely known to Americans as a company at the forefront of the green business movement, winning numerous awards for its pioneering models of sustainability in the food industry. But what sets Whole Foods apart from other companies committing to carbon neutrality and pro-environment stances in publicity? How deserving is Whole Foods of the accolades it constantly receives from government and consumers alike?

¹³² Paige Brady, "Powered by Recycled Cooking Oil," weblog post, Whole Story: The Official Whole Foods Market Blog, 2 Dec. 2008, <<http://blog.wholefoodsmarket.com/category/green-action/page/3/>>.

¹³³ "Stop Trashing the Climate Executive Summary," Stop Trashing the Climate, June 2008, 2009 <<http://www.stoptrashingthecclimate.org/>>.

¹³⁴ "Whole Foods Market® Announces Alternative Energy Investment, Energy Savings with New Store Designs, Existing Store Retrofits." Whole Foods Market Press Room.

¹³⁵ "Partner Profile | Green Power Partnership| US EPA," U.S. Environmental Protection Agency, <<http://www.epa.gov/greenpower/partners/partners/wholefoodsmarket.htm>>.

¹³⁶ "Whole Foods Wins 2009 Green Choice Award," Progressive Grocer- Find Supermarket Industry News & Grocery Store News, 19 Apr. 2009, <http://www.progressivegrocer.com/progressivegrocer/content_display/features/e3ib644036b4dd16974ac62c407c1139cab>.

The REC purchase introduces a different tactic from those previously employed by Whole Foods on behalf of environmental responsibility. While other initiatives occurred onsite, investing in off-site renewable energy from wind farms represents a capitalist approach that trusts the market to reflect pricing realities of supply and demand for renewable energy. Renewable Energy Credits (henceforth RECs) like those Whole Foods is purchasing have become increasingly popular in the past several years, and have brought up a whole new debate around green business, greenwashing, and capitalist approaches to the mitigation of climate change and fossil-fuel dependence.

The basics are as follows: As of 2006, Whole Foods began buying Renewable Energy Credits (or Renewable Energy Certificates) to match 100% of its electricity use in all of its Canadian and U.S. stores, facilities, bakehouses, distribution centers, regional offices and regional headquarters. According to media releases, The 458,000+ megawatt-hours (MWh) of renewable energy credits Whole Foods is purchasing from national wind farms will avoid more than 700 million pounds of carbon dioxide pollution this year. “To have the same environmental impact, more than 60,000 cars would have to be taken off the road or more than 90,000 acres of trees would have to be planted.”¹³⁷ Just this year, Whole Foods renewed its commitment to purchasing offsets for all of its North American stores and facilities.

The significance of the Whole Foods purchase appears tremendous for its contribution to stability of climate and national energy supply—the company now claims to purchase or generate “100 percent” of its total North American power load from renewable sources—with almost 50 percent coming from wind and the rest coming from solar, geothermal, small-hydroelectric, and geothermal, and each store making its own decisions based on regional climate and appropriateness of renewable sources. “In the corporate world, this is huge,” says Kurt Johnson, head of the EPA's Green Power

¹³⁷ “Whole Foods, FedEx Kinko’s Snap up Renewable Energy Credits,” The National Environmental Education & Training Foundation 19 Jan. 2006, SRI World Group, Inc, 2 Apr. 2009 <<http://www.socialfunds.com/news/article.cgi/1908.html>>.

Partnership. "When a market leader does something like this, others will emulate."¹³⁸ As we have seen from its history, Whole Foods has continuously played a vital role in swaying the national culture around shopping for food.

IV. Critiques

But we cannot rely solely on self-reported information to determine the ethical implications of Whole Foods' offset purchase. To do so would be blindly to accept that businesses can be trusted to do the right thing. In line with critiques of "green consumerism," there are certain drawbacks to corporate and consumer approaches to climate change brought about by the American food system. We will now examine some critiques from the outside and apply them to the REC purchase. How does Whole Foods stand up against its critiques? How transparent was it about its decision to offset? And what implications does this have for climate change?

Guiding Questions:

- 1) How has Whole Foods prioritized offsetting within a larger approach to profit and sustainability?
- 2) How has the large-scale nature of Whole Foods affected its environmental mission? Was scale responsible for the REC purchase?
- 3) Is green-washing at work here?
- 4) What about social justice? How do their actions hold up under the scrutiny of those who critique capitalist approaches?
- 5) What does this mean for the social entity of green business and corporate approaches to climate change?

A. Profit

The voluntary purchase of any type of offset credit may initially seem at odds with the profit motive, especially given the concerns regarding the future of the voluntary offset market. For a company to spend money on something that will benefit the country's energy security as a whole, but not necessarily its bottom line, seems strangely misguided through a strictly corporate viewpoint. This is the same company that only a few months ago was scolded by the Federal Trade Commission for aggressively trying to

¹³⁸ Bruce Horovitz, "Whole Foods Goes with the Wind," USA Today: Online 9 Jan. 2006, <http://www.usatoday.com/money/industries/food/2006-01-09-whole-foods-usat_x.htm>.

devour its competitor Wild Oats, which would nearly double revenue for some Whole Foods stores at the expense of market diversity and consumer choice. This very same company has been shown by FTC documents to negotiate with its suppliers to drive up costs for Wal-Mart, one of its biggest threats in the market for organics!¹³⁹ Where was this corporate mindset, this blatantly profit-seeking attitude during the purchase of the Renewable Energy Credits and other noble decisions on the part of Whole Foods Market?

In actuality, Renewable Energy Credits represent a certain form of investment. If after mandatory regulations were put into place, RECs went up in value, Whole Foods could then sell them for a profit. The purchase could thus be explained purely from the standpoint of investment strategy (buying low and selling high is one of the primary principles of investment), but as it is becoming clear from company literature, Whole Foods is driven by some surprisingly selfless factors outside of its profit imperative. For one thing, altruism has led Whole Foods to commit a minimum of 5% of its annual profits to community non-profit organizations—a philanthropic gesture that indicates the company's willingness to acknowledge that the free market fails to some extent by undervaluing non-profit work.

Additionally, Mackey makes it clear that profit is not the final goal of business. He explains this in the following:

My thesis about business having important purposes besides maximizing profits should not be mistaken for hostility toward profit... Profits are one of the most important goals of any successful business and the investors are one of the most important constituencies of the business. Paradoxically, the best way to maximize profits over the long-term is to not make them the primary goal of the business.¹⁴⁰

¹³⁹ "Documents Describe Whole Foods Strategy.," The New York Times Online 15 Aug. 2007, 14 Mar. 2009
<<http://www.nytimes.com/2007/08/15/business/15food.html?ex=1344830400&en=065f213bfb61f1b&ei=5088&partner=rssnyt&emc=rss>.
<http://www2.wholefoodsmarket.com/blogs/jmackey/2006/11/09/conscious-capitalism-creating-a-new-paradigm-for-business/>>.

¹⁴⁰ John Mackey, "Conscious Capitalism: Creating a New Paradigm for Business," weblog post, The CEO's Blog, 9 Nov. 2006, 14 Mar. 2009
<<http://www2.wholefoodsmarket.com/blogs/jmackey/2006/11/09/conscious-capitalism-creating-a-new-paradigm-for-business/>>.

Here, we can see explicitly how Mackey's approach to business echoes Hawken's philosophy to the utmost. (Hawken: "The ultimate purpose of business is not, or should not be, simply to make money. Nor is it merely a system of making and selling things. The promise of business is to increase the general well-being of humankind through a service, a creative invention and ethical philosophy. Making money is, on its own terms, totally meaningless, an insufficient pursuit for the complex and decaying world we live in." ¹⁴¹) In cases where profit and environmental protection overlap, Mackey and Whole Foods seem committed to doing the right thing.

Through Mackey's business experience, he has discovered that long-term profitability is best achieved by embracing "a deeper business purpose, great products, customer satisfaction, employee happiness, excellent suppliers," and community and environmental responsibility.¹⁴² Thus, it is unlikely that the REC decision (and any other green initiative that Whole Foods takes) is reflective only of a desire to make money. Since the grocery wholesale and retail food industries consistently have low profit rates (Hallberg, 2001), Whole Foods and others of its kind are able to maintain a close connection to their original founding reason—to provide a needed service to their communities in a sustainable fashion without getting carried away by big figures with dollar signs behind them.¹⁴³ This is, at heart, what natural capitalism is all about.

Or is it all just an act? As pointed out by Schendler in *Getting Green Done*, sometimes companies within the sustainable-business movement possess an endemic lack of willingness to admit failure (or even imperfection), a flaw that keeps the whole industry from learning from its mistakes. People can get so caught up in the cheery philosophy of double green (green dollars and green environment) that they ignore the real-world challenges—the difficulty of actually making change.¹⁴⁴

B. Greenwashing

¹⁴¹ Hawken, *The Ecology of Commerce*.

¹⁴² Mackey.

¹⁴³ Hallberg.

¹⁴⁴ Schendler.

*“Green programs cannot be a perfume to cover the smell of dirty corporate laundry. If used that way, they’ll backfire, because they invite greater scrutiny from the public, the media, and environmentalists.”*¹⁴⁵

*“Food industries have generally laid low on climate issues in the USA. As public awareness grows, some have engaged in well-publicized efforts such as purchasing carbon credits, fashioning themselves as partners in reducing greenhouse-gases rather than opponents.”*¹⁴⁶

Though Whole Foods is by no means an opponent of greenhouse-gas mitigation, its purchase of Renewable Energy Credits could be explained through the frameworks of greenwashing and liberation marketing. There is a gaping difference between the praise-filled literature that Whole Foods puts out through its media outlets and the unforgiving perspectives of its critics, most notable among whom is Michael Pollan, author of *The Omnivore’s Dilemma*. While Whole Foods touts its commitment to “sustainable agriculture,” “wise environmental practices,” and “integrity in all business dealings,” many remain unconvinced about the true legitimacy of its claims. These limitations are coupled with a concern that “corporate organic” is not really all that different from conventional agriculture.

Coined by NY environmentalist Jay Westerveld, the term “greenwashing” refers to “the cynical use of environmental themes to whitewash corporate misbehavior.”¹⁴⁷ Carbon offsetting in particular is targeted as a method of greenwashing, especially if conducted by companies that do nothing internally to minimize harmful environmental impact. While Whole Foods has certainly pursued a great deal of initiatives that truly do represent an ethic of care and respect for the environment, it is possible that the media attention and consumer support it garners from “green energy” claims are disproportionate to the actual good it is doing for the climate. According to Green Marketing expert Janet Bridges, “Even when corporations voluntarily strengthen their record on the environment, they often use multi-million dollar advertising campaigns to

¹⁴⁵ Janet Bridges, “Green Marketing: Promotion and Publicity Tips for Green Businesses,” Clean, Green and Read All Over: Ten Rules for Effective Corporate Environmental and Sustainability Reporting, ed. J. Emil Morhardt (Milwaukee, WI: ASQ Quality P, 2002).

¹⁴⁶ Chan, Neff, and Smith.

¹⁴⁷ “Introduction to StopGreenwash.org,” Greenpeace | Greenwashing, <<http://stopgreenwash.org/introduction>>.

exaggerate these minor improvements as major achievements.”¹⁴⁸ I will examine the ramifications of the REC purchase in more detail in Chapter 3B, but for now I will turn to another example within the Whole Foods model that has been perceived as an unfair manipulation of green marketing.

In his first “Letter to Whole Foods,” Michael Pollan argues that the company does not buy as much local, seasonal food as it purports to do through its store signage. He points out that Whole Foods claims to buy top quality products with the best environmental practices, yet continues to purchase grass-fed beef from New Zealand rather than lending support to grass-fed operations in the U.S.. He demands that Whole Foods raise the bar again, arguing that “as competitors like Wal-Mart and Safeway move into selling industrial organic food, Whole Foods can distinguish itself by moving to the next stage, doing things they can't possibly do... All Wal-Mart knows is how to source industrial organic food from China.”¹⁴⁹ Pollan’s concern centered on the company’s new regional distribution system that had replaced its former modus operandi of “backdoor sales,” a program that had allowed small local farmers to sell directly to individual Whole Foods stores. The regional distribution model adopted in the past few decades had shut these farmers out.¹⁵⁰

In response to the letter, John Mackey sent Pollan an update on the company’s advances. Apparently, Whole Foods had risen to the challenge by adjusting its purchasing practices to be more friendly to small local farms, even extending an offer to Joel Salatin—a small farmer critical of big farms and stores featured in Pollan’s culturally iconic and seminal book *Omnivore’s Dilemma*. It certainly appeared that Whole Foods was addressing Pollan’s critiques, as it had recently stepped up local food offerings, promising when it opened a new store in New York City’s Union Square in 2005 to buy up to 20 percent of its produce in the tri-state area.”¹⁵¹ In the months after Pollan’s book came out, Whole Foods responded in 2006 with a series of initiatives that encouraged

¹⁴⁸ Bridges.

¹⁴⁹ Michael Pollan, “My Letter to Whole Foods,” letter to John Mackey, 12 June 2006.

¹⁵⁰ Pollan, “My Letter to Whole Foods.”

¹⁵¹ Fromartz.

local trade—all stores were required to buy from at least four local farmers and the company began giving low-interest loans to local farms.¹⁵²

Pollan applauded this, telling Mackey that small farmers around the country were sensing “a new tone of welcome from your buyers,” and that people in the American grass-fed beef community felt that “Whole Food has made a concerted effort to reach out and support the important work they're trying to do.”¹⁵³ Here it is impossible not to acknowledge Whole Foods’ responsiveness to its critics, which demonstrates a mature level of care about the issues and a willingness to acknowledge flaws in its business practices. But this example prompts the question “what else is Whole Foods pretending to be doing/valuing because nobody has called them out on it yet?” If the corporate decision-makers really care about renewable energy, why wouldn’t Whole Foods directly fund wind farms, or spend the REC’s money on lobbying for structural change in the energy sector? Are there better ways to protect the climate, like directly funding wind farms, or spending that money on lobbying, or developing ways to generate clean power using methane, a highly potent greenhouse gas that is currently vented from coal mines? In Chapter 3B, we will find out.

C. Liberation Marketing

“Wall Street isn’t going to corrupt Whole Foods Market. We’re going to purify Wall Street.”¹⁵⁴ - John Mackey

“When we said organic, we meant local. We meant healthful. We meant being true to the ecologies of the regions. We meant mutually respectful growers and eaters. We meant social justice and equality.”¹⁵⁵ – Critics of “Industrial Organic”

Liberation marketing refers to the usurpation of previously “fringe” or radical viewpoints, values, and symbols by parties that are part of the dominant societal structure against which the reactionary discourse was originally formed. Pollan explains that one of the triumphs of recent free-market capitalist thought has been “to redefine the

¹⁵² Koehn and Miller.

¹⁵³ Michael Pollan, "My Second Letter to Whole Foods,"Michael Pollan....., 15 Sept. 2006, <<http://www.michaelpollan.com/article.php?id=83>>.

¹⁵⁴ Mackey.

¹⁵⁵ Severson.

public interest as simply whatever the public is interested in buying.”¹⁵⁶ Current environmental problems stem largely from consumerism in industrial countries, and differs from necessary consumption in that it represents an ideology that society should maximize and pursue consumption without limit.¹⁵⁷ In the case of corporations that allow for “responsible” and “political” consumption (couched in phrases like “voting with your dollars”), the market works not only to redefine dissent, but to occupy the niche that dissident voices used to occupy in the American cultural spectrum. If “The Body Shop owns compassion, Nike spirituality, Pepsi and MTV youthful rebellion,”¹⁵⁸ then does Whole Foods own environmentalism? Space for dissident voices in the conversation around food used to be occupied by small organic farmers. Could this space now be controlled by Whole Foods executives, shoppers and employees?

Whole Foods has been criticized in several other arenas for making purely profit-based decisions that were harmful to its employees and disloyal to its values. For example, in a recent article about the anti-union positions of Starbucks and Whole Foods, Josh Harkinson argues the following:

Unlike Costco, where 20 percent of workers are represented by Teamsters, Whole Foods and Starbucks haven’t been organized by traditional unions. And yet their culture are steeped in the language and norms of the labor movement. Starbucks calls its workers ‘partners’ and Whole Foods dubs them ‘team members.’...¹⁵⁹

Additionally, Whole Foods has reportedly “resorted to tough union-busting tactics—often breaking the law along the way.” According to the NLRB, after a group of truck drivers working for the San Francisco Whole Foods distribution center decided to unionize, the company fired them and proceeded to change its sick-leave policy, “harass and discipline” its employees, and refuse to provide information to the union for contract negotiation. In the recent financial crisis, Whole Foods has continued to build new stores even as an existing stores are freezing hiring and cutting back employee hours. According

¹⁵⁶ Pollan, “My Second Letter to Whole Foods.”

¹⁵⁷ Wenz, 198.

¹⁵⁸ Frank.

¹⁵⁹ Josh Harkinson, "Are Starbucks and Whole Foods Union Busters?" *Mother Jones Online* 6 Apr. 2009, <<http://www.motherjones.com/politics/2009/04/are-starbucks-and-whole-foods-union-busting>>.

to an employee of a San Francisco store that is being downsized, “If they can cut costs at our level and then open up a new store, that’s what shareholders want.”¹⁶⁰

Though these findings are worrisome and reminiscent of liberation marketing, Whole Foods management allows staff to vote on company-wide initiatives and offers an average of \$30,000 a year plus health insurance for shop-floor staff (well above the U.S. average). No “team member,” not even Mackey, earns more than 14 times the salary of the lowest-paid worker.¹⁶¹ Whole Foods routinely makes it onto *Fortune Magazine’s* “Best Companies to Work for.”¹⁶² Along with these facts, Mackey claims to look out for his staff, thus taking some legitimacy out of the liberation marketing viewpoint on Whole Foods’ practices.

With respect to the REC’s purchase, it is possible that liberation marketing and greenwashing are at play. As long as its customers remain convinced that the store they shop at is “100%” responsible for its electricity use, Whole Foods can do whatever it wants with regards to emissions. Through advertising and image management, Whole Foods may be reducing citizens who care about the environment to one-dimensional economic actors with money as their only tool for exercising political power. Liberation marketing and greenwashing produce apathy and complacency while the real efforts toward combating climate change and other social emergencies fall to the wayside. As Auden Schendler suggests, REC’s may merely be “the indulgences we buy to escape the twenty-first-century environmental inquisition.”¹⁶³

Whole Foods is doing great things that are hard to do in a fossil-fuel culture. It has certainly reformed several aspects of the food industry. Revolutionary? Maybe. But it cannot be denied that first and foremost, Whole Foods answers to its bottom line. The employee who joked that Mackey is not a manager but an anarchist is misunderstanding

¹⁶⁰ Ibid.

¹⁶¹ Arlidge.

¹⁶² Harkinson.

¹⁶³ Schendler.

one of the inherent values of anarchism—its extreme dislike of institutionalized capitalism.

D. Scale: Big is Bad (In the Organic Food Movement)

“America has a romance with small businesses. And it has mistrust of large businesses. Whole Foods is out to prove that wrong. I don’t see any inherent reason why corporations cannot be just as caring and responsible as small businesses.”¹⁶⁴
–John Mackey

Scale is a frequently acknowledged and crucial issue within both environmentalist and business debates. Pollan argues that scale is the most vital question that confronts us, both economically and socially, and insists that if Whole Foods can continue its commitment to supporting local agriculture while still turning a profit, it will have successfully “disproved the widespread assumption that big corporations can only deal profitably with other big corporations, and in the process can’t help but crush small and local producers and economies.”¹⁶⁵ The Whole Foods case study is particularly revealing to examine against critiques of scale, in part because there is a well-documented history of the American organic and natural foods movement. From its inception to its current state, organic philosophy can help us to analyze what has been lost, gained, and maintained in Whole Foods’ transition from a small, one room store to a huge multinational corporation. Though “alternative” farming started out with idealistic goals, it was quickly co-opted by corporations and the profit motive to ensure a reformed, rather than revolutionized, food system. This outcome, for better or for worse, has left the small idealistic organic farms competing against their large, corporate, and profit-grubbing counterparts.

i. Pro-Big

With respect to environmental stewardship and remediation, there are several undeniable benefits to operating a large-scale corporation. With economies of scale, wider accessibility and affordability in target markets is possible and the costs of producing wholesome food is cheaper. Additionally, large-scale operations like Whole

¹⁶⁴ Koehn and Miller.

¹⁶⁵ Pollan, “My Second Letter to Whole Foods.”

Foods have significant influence on the products and product quality supplied by farmers and distributors. On its corporate website, Whole Foods declares “support for organic farmers, growers and the environment through our commitment to sustainable agriculture and by expanding the market for organic products,” indicating that it takes pride in its mammoth influence on the availability of organic foods in the market.¹⁶⁶ Other benefits used to defend large corporations include the promise of job creation, long term stability, and the ability to hire specialized workers and consultants for green initiatives. Much to environmentalists’ surprise, a recent survey found that public corporations pursue green initiatives while smaller companies “lag.”¹⁶⁷

Whole Foods is not alone in stocking produce from large industrial organic farms like Cal-Organic and Earthbound Farms.¹⁶⁸ Michael Pollan himself concedes that “Today the most important scale issue is not that “big is bad” but, since big is here to stay, exactly how can such entities can engage with small and local ones?”¹⁶⁹ But even in recognizing the benefits of size, the drawbacks to running a corporate chain while trying to maintain “integrity in all business dealings,” and supporting local and sustainable agriculture, are real. The critiques of mass production are undeniably important for understanding the REC deal in the context of large scale food operations. A large part of the need to look elsewhere for renewable energy may stem from the fact that Whole Foods itself does not own enough land to generate the amount of wind that it takes to power its energy-intensive processes. Most legitimate third party assessments find that, for Whole Foods, corporate size and its associated economies of scale translate somewhat to lost integrity and environmental values (practice and ethics). Though Mackey and his team have some defenses worthy of consideration in favor of market influence and mainstream persuasion, the evidence for the benefits of small organic undeniably convincing.

ii. Anti-Big

¹⁶⁶ “Our Core Values.” Whole Foods Market Website.

¹⁶⁷ “Survey Shows Public Corporations Upping Green Initiatives While Smaller Companies Lag,” [GreenBiz.com](http://www.greenbiz.com/news/2006/04/21/survey-shows-public-corporations-upping-green-initiatives-while-smaller-companies-la) 21 Apr. 2006, <<http://www.greenbiz.com/news/2006/04/21/survey-shows-public-corporations-upping-green-initiatives-while-smaller-companies-la>>.

¹⁶⁸ Fromartz.

¹⁶⁹ Pollan, “My Second Letter to Whole Foods.”

*“For those faithful to the idea of organic as it emerged in the 1960s—a way of life that rejected conventional food systems, industrial farms, agrichemicals, even militarization—shopping at Whole Foods posed a unique dilemma.”*¹⁷⁰

According to Milton Hallberg’s study of “Economic Trends in U.S. Agriculture and Food Systems since World War II,” the logic behind economies of scale progresses as follows:

Food-processing, wholesaling, and retailing firms are becoming larger at the expense of small local firms that are no longer able to compete. These larger firms do not depend solely on any one production area for raw materials. Rather, they obtain their supplies anywhere they can get the volume and quality necessary to support a nationwide or regionwide marketing program... For a production activity to be viable in a particular area, it must be undertaken on a large enough scale that processing capacity (as well as other support services) can be provided at an economically justifiable scale. It must also be undertaken on a large enough scale that processors will find it economical to buy from local producers.”¹⁷¹

This concentration of market power is a major concern for environmentalists and social justice advocates. With ready-access to markets reduced by large companies, small-scale producers for local markets are at a serious competitive disadvantage. It was recently discovered that half of all organic sales in California come from the 27 largest farms (2% of the total number of farms), eight top food corporations own the 38 biggest Organic businesses, and tons of huge corporations (Coke, Dole, General Mills, Heinz, Kellogg, Sara Lee) have all formed “partnerships” with organic companies or developed their own organic lines.¹⁷² Paul Hawken, the organic food entrepreneur and author of *Natural Capitalism*, has complained that “massive scale and centralization of power and capital is the antithesis of what we had in mind when we started the natural and organic food business in the U.S.”¹⁷³ In the organic ideal, farms and stores were to be small and family-run in order to set and maintain standards for environmental responsibility, ethical treatment of animals, and human health. Pollan points out that supermarket chains, particularly Whole Foods, have done well by expanding the market for organic produce but have done so at the expense of local food producers and distributors.

¹⁷⁰ Koehn and Miller.

¹⁷¹ Hallberg.

¹⁷² Fromartz.

¹⁷³ Ibid.

Though Whole Foods can be credited for its introduction of organic products to mainstream American culture, the economies of scale it has adopted to do so may sometimes seem “incompatible with the values of the counterculture that had originally supported organics.”¹⁷⁴ As Samuel Fromartz explains in *Organic, Inc.*, some organic farms have done “whatever they could to increase sales, drive down prices, and compete with conventional farmers in mainstream markets. This means growing organic food on a large scale, shipping it nationally, and making sure prices are competitive so people will buy it at the supermarket.” He explains that while this approach certainly brought organics to the mainstream, it shocked many people loyal to the organic market because it appeared to be so much at odds with small-farm ideals.

In his book Fromartz refers to Earthbound farms as an example of this new corporate organic market approach (which “20 years earlier would have seemed an oxymoron”) and describes the heated debates it inspired in California.¹⁷⁵ Across the nation, critics complained that “When we said organic, we meant local. We meant healthful. We meant being true to the ecologies of the regions. We meant mutually respectful growers and eaters. We meant social justice and equality.”¹⁷⁶ Eventually, Whole Foods began to be referred to as “corporate organic.”

The purported mistrust of big corporations does not hold for all of America— the popularity of Wal-Mart is a prime example, and especially relevant now that Wal-Mart has taken on sustainability measures, including a growing offering of organic foods. But the judgments of large-scale organics are not solely about image. Whole Foods’ critics who take issue with its reliance on industrial explain that it has “less to do with the romance of a small farm than with environmental sustainability.” Their concern is that Whole Foods’ practice of stocking its stores all over the country with produce from a few

¹⁷⁴ Koehn and Miller.

¹⁷⁵ Fromartz.

¹⁷⁶ Koehn and Miller.

large industrial farms defeats the purpose of organic farming which is supposed to benefit the environment by reducing the dependence on fossil fuels.¹⁷⁷

Adding in recent concerns over climate change, it began to seem even more dissonant that Whole Foods was attempting to protect the environment and communities, while still importing food from far away and in huge quantities that necessitated industrial farming techniques. Between transportation, industrial-organic supply sources, and in-store electricity usage, it's no wonder that Whole Foods had to resort to buying offsets.

E. Environmental Justice

While the typical social justice critiques of the global carbon offsetting phenomenon may not apply directly to the Whole Foods REC purchase (since the renewable energy projects are based in the United States and thus do not impinge on rights of indigenous peoples), there are several issues that come up around Whole Foods that are relevant to environmental justice. In evaluating levels of access, participation, and labor across income and class levels, it becomes clear that Whole Foods falls down somewhat on its commitment to “caring about communities,” at least within the United States. Though it donates 5% of its annual profits to non-profit organizations, demonstrating a philanthropic level of concern for equality, Whole Foods inevitably perpetuates the systematically unequal distribution of grocery stores throughout neighborhoods of different classes. While food should be a basic human right, shopping at Whole Foods remains a privilege.

i. Gentrification and Exclusion:

Though as a corporation it has accomplished great things in the way of social responsibility, Whole Foods is seen in some circles as hypocritical to its liberal image. For one thing, the corporatized organic food movement as it exists today is frequently pegged as being elitist and white. Affordability is a huge concern for low-income communities and families while the eco-bag toting, whole-wheat bread vegetarian is an

¹⁷⁷ Ibid.

image reserved mostly for white educated Americans. Gentrification is a possible explanation for this perception. Even lower-priced grocery stores have historically fled low-income and minority neighborhoods—a pricier version like Whole Foods is nowhere to be seen in any of the most impoverished cities or towns in America.¹⁷⁸

Secondly, though it cannot be held responsible for food justice necessarily because it is a corporation that answers to shareholders (who would never accept entrance into low-income neighborhoods where there would be a mismatch in income and prices), Whole Foods *is* in fact perpetuating a pattern of inequality in the provision of healthy food across race and class lines. Though it provides healthy food to certain people and communities who are willing and able to pay for its products, Whole Foods fails to provide it to the communities that could benefit most from access to healthy food.

ii. Labor injustice:

What's more, Whole Foods relies upon a different demographic for the *supply* of its foods than it does for demand. Labor is crucial to produce farming—organic or conventional—which is why migrant workers are hired throughout the industry.¹⁷⁹ But despite their importance in Whole Foods' supply chain, migrant workers rarely can afford or access Whole Foods products. According to the Organic Consumers Association, “Migrant and seasonal farm workers represent some of the most economically disadvantaged people in the United States,” and comprise the second lowest paid job force in the country. Citing recent findings of the National Agriculture Workers Survey (NAWS), the OCA lists that close to 75% of American farm workers earn under \$10,000 per year while three out of five farm worker families live under the poverty line.¹⁸⁰ What's more, “Many farm workers are undocumented and particularly vulnerable to exploitation in the workplace.”¹⁸¹

¹⁷⁸ For more on Whole Foods and gentrification, see http://www.washingtonpost.com/wp-dyn/content/article/2006/07/21/AR2006072101582_pf.html; http://www.sfexaminer.com/local/Whole_Foods_in_Haight_comes_up_for_debate.html; and <http://www.mitchglaser.com/journal/2005/11/whither-whole-foods.html>.

¹⁷⁹ Fromartz.

¹⁸⁰ “OCA's Resource Center on Fair Trade and Social Justice,” Organic Consumers Association, <<http://www.organicconsumers.org/fairtrade.cfm>>.

¹⁸¹ *Ibid.*

Although there are ways for farms to pay their migrant workers fair wages, Whole Foods has no control over the labor practices of the farms from which it sources its organic products. Environmental injustice is definitely at play in the pattern that poor folks of color, immigrants produce the high quality food for rich folks, yet don't get to eat the fruits of their labor because they can't afford it and don't have access to it in their communities. Similar to concerns over carbon offsetting that there is a gap between where the environmental responsibility is happening and who gets to benefit from it, Whole Foods poses a problem of unequal power dynamics. Because the company maintains dependence on the politically and economically powerless yet provides goods and services to the politically and economically powerful, there is a clear divide between those required to take responsibility and those who get to reap the benefits of the labor.

Although the people producing the food in the fields are perhaps being protected from pesticides (though probably are not in the big picture, because they are "migrant" and probably work on a number of conventional farms as well that use pesticides), they are rarely able to afford pesticide-free food. Additionally, Whole Foods almost never locates in rural or low-income communities. So if there is no affordable farmer's market available, these folks are systematically out of luck.

iii. Food Prices

*"As a rule, organic food cost more to produce than conventional food, especially when it was grown on small, family-run farms rather than industrial complexes... The prices at Whole Foods had long reflected this difference, earning it the tongue-in-cheek name 'Whole Paycheck.'"*¹⁸²

There is validity to the perception that Whole Foods caters to the rich—its prices are certainly higher than those for conventionally-grown food. According to one article, "While most food giants are piling it high and selling it cheap, Whole Foods is focusing on quality at high prices—and reaping the profits."¹⁸³ Though it is affordable for some families, the firm's organic and local food are priced much higher than that of its rivals.

¹⁸² Koehn and Miller.

¹⁸³ Arlidge.

One British journalist writes that “Mackey is doing for US supermarkets what Pret Á Manger’s Julian Metcalfe did for British sandwich bars—mixing natural ingredients and customer service in a way that appeals to consumers who want something better for themselves and the environment and are willing to pay more to get it.”¹⁸⁴ This practice has led Whole Foods to be dubbed derogatorily, “Whole Paycheck.”

Americans spend a small percentage of their expenditures on food compared to other countries and to their own American predecessors. According to Milton Hallberg, “The proportion of personal consumption expenditures spent on food has declined continuously over the 1950-1998 period. American consumers spend an estimated 8 to 9 percent of their private consumption expenditure on food—the lowest of any country in the world!”¹⁸⁵ Perhaps paying to reflect the environmental realities of our food-production system and transport is not such a bad thing. In a 2006 interview, Mackey revealed that he views the high cost of natural food as a trade-off, insisting that “if customers are unhappy with the prices, the services, or the selection of my business... they are free to shop at another competitor. If our team members are unhappy with their wages and benefits, or the working conditions, they are free to seek a job with a different firm that provides more of what they seek.”¹⁸⁶

But just this year regulators from the FTC were attempting to block Whole Foods from acquiring Wild Oats stores on antitrust grounds, arguing that it would mean higher prices for organic and natural food.”¹⁸⁷ While the chain’s reputation for expensive produce may in part be justified by the fact that offering food created to organic standards necessitates higher prices in order to cover higher production costs, it seems strange that Mackey would claim his support for consumer choice while simultaneously pushing

¹⁸⁴ Ibid.

¹⁸⁵ Hallberg.

¹⁸⁶ Mackey.

¹⁸⁷ Sarah Skidmore, “Whole Foods, Wild Oats Integration Challenged by FTC,” Huffington Post Online 12 Jan. 2009, http://www.huffingtonpost.com/2009/01/12/whole-foods-wild-oats-int_n_157222.html sss(The case has since been resolved, see <http://www.wholefoodsmarket.com/pressroom/2009/03/06/whole-foods-market%C2%AE-and-ftc-reach-settlement/> for more details.)

through mergers that essentially limit competition that can drive down prices and make organic food more affordable.

In some ways, higher prices are good because they reflect the “true cost” of food production, but in others they are problematic because they serve to stratify access to healthy foods according to social classes. Clearly it is not a simple matter of choosing between healthy products from Whole Foods and a cheaper, less healthy alternative. Forcing, or even allowing, this dichotomy is to accept the unequal conditions within our society that dictate who has access to healthy food and who does not. The problem is when folks scrounging to save money choose to buy unhealthy vs. healthy food *systematically* because of their race or class. Really Whole Foods is offering a better choice only to those who can afford it.

iv. Defense of Whole Foods’ Commitment to Communities

Though the critiques of Whole Foods’ community ethic are valid, it should not be made out as a typical “evil corporation,” hell-bent on exploiting the weak and serving of the powerful. Several recent initiatives show that Whole Foods executives do actually care about the state of the world and the people living in it. The company website asserts that “Our stores are not cookie cutter big box-type stores with directives from ‘corporate’ about how to run the business. Each of our stores has a lot of latitude in deciding the best way to operate that individual store to meet the needs of the local community.”¹⁸⁸ In fact, Whole Foods offers several community-giving programs at the local, national, and international level for its customers to support while they shop. Firstly, each store donates leftover and extra food to local food banks and shelters, and offers a few annual promotions called “5% Days” where five percent of that day’s net revenue are donated to a community nonprofit organization. These initiatives show at the very least a symbolic level of concern for community vitality outside of the store’s privileged customers.

¹⁸⁸ "Community Giving | WholeFoodsMarket.com," Whole Foods Market: Natural and Organic Grocery, 28 Apr. 2009 <<http://www.wholefoodsmarket.com/values/giving.php>>.

Secondly, Whole Foods takes into account its customers' financial situations under difficult circumstances. The recent economic downturn has led the company to offer a new PR campaign in which employees teach customers how to save money while shopping at Whole Foods. The stores and website offer a brochure that gives coupons, promotion updates, budget recipes, and tips for making the most out of basic products. The brochure also encourages customers to engage in money-saving environmental practices such as washing clothes in cold water, reusing shopping bags, and using cloth kitchen towels instead of paper.¹⁸⁹ Though the campaign may be more intended to avoid losing business than to accommodate the needs of more price-elastic customers, it is undeniably redolent of a community ethic of care.

Thirdly, Whole Foods has created a philanthropic offshoot called the "Whole Planet Foundation," which aims to "create economic partnerships with the poor in developing-world communities that supply our stores with products."¹⁹⁰ In conjunction with the world-renowned Grameen Bank and its founder Muhammad Yunus, Whole Foods provides micro-credit loans for community projects and nonprofit organizations around the world—especially for rural and women groups aiming to develop organic and environmentally-friendly methods of food production. According to the corporate website, the Whole Planet Foundation "fights poverty through micro-lending in rural communities around the world, providing a good deal of the funding for the loans and underwriting the administrative costs so every dollar donated goes directly to those who need it most." Referring to the coffee, tea, nuts, fruits, and species that Whole Foods sources from developing countries, John Mackey explains that "As we've done business around the world, we have increasingly felt the responsibility to help those communities where we're trading... we have a responsibility to all of our stakeholder groups, and the global community is included in those groups"¹⁹¹

¹⁸⁹ Cameron Scott, "Trader Joe's Gets it Easy," San Francisco Chronicle 26 Mar. 2009, <http://www.sfgate.com/cgi-bin/blogs/green/detail?entry_id=37558>.

¹⁹⁰ "Whole Foods Market Establishes Whole Planet Foundation to Fight Poverty in Developing Countries by Empowering Those in It," Whole Foods Market Pressroom, Whole Foods Market, <<http://www.wholefoodsmarket.com/pressroom/2005/10/11/whole-foods-market-establishes-whole-planet-foundation-to-fight-poverty-in-developing-countries-by-empowering-those-in-it/>>.

¹⁹¹ Ibid.

F. Transparency

At first glance, Whole Foods does not seem to come through on its claim to transparency as a core value, as the missing explanation for its REC purchase was in part what led me to this exploration in the first place. Though the purchase itself is mentioned numerous times on the corporate website and in press interviews, the logic behind it and the crucial information needed to understand such an “unprecedented” endeavor remains unavailable to the general public. The Clean-Air Cool Planet report on carbon neutrality gave Whole Foods a ranking of “vague” in the area of transparency (“ready availability to stakeholders and the public of clear information on a company’s energy use, footprint, and other emissions-related information”) surrounding carbon-emissions reduction strategy.¹⁹² According to the report, “the Whole Foods website does not disclose its total emissions, and provides no breakdown of the emissions that fall within its boundary. The company purchases renewable energy credits to offset its emissions, but the total quantity of credits purchased—and the specific projects used—is not revealed.”¹⁹³ While the complexities of the voluntary REC and offset markets necessitate clear communication between consumer and company, thus far it is impossible to determine anything about the REC’s beyond the mere facade of an economic transaction from Whole Foods publications.

However, Whole Foods is by no means a company that conducts its business behind closed doors. Just a few days ago, in honor of Earth Day, Whole Foods conducted a liveblog conversation open to the public to address things customers, businesses, and municipalities can do to reduce their environmental impact. Kathy Loftus (Whole Foods Market Global Leader of Sustainable Engineering, Maintenance and Energy) and my uncle Lee Kane (North Atlantic regional Eco-Czar-green mission specialist) were also present on the chat to field questions about Whole Foods’ environmental initiatives. This type of blog interaction reflects Whole Foods’ willingness to interface with its customers and critics. I give much-deserved credit to Whole Foods for transparency via willingness to speak with concerned citizens, especially as I was recently granted an insider interview

¹⁹² Burtis and Watt.

¹⁹³ Ibid.

with the man responsible for pushing through the “landmark” REC’s purchase. The next part of this chapter will reexamine the purchase and provide inside information from a Whole Foods executive responsible for pushing through the offset decision.

V. Conclusion

*“There are spiritual dangers in now owning a farm. One is the danger of supposing that breakfast comes from the grocery.”*¹⁹⁴

Aldo Leopold

*We are Whole Foods, not holy foods.*¹⁹⁵

John Mackey

Whole Foods is addressing a large part of its emissions through the REC purchase. But given the company’s areas of weakness, it is possible that offsetting is an inadequate way to address the challenges facing the food industry and the environment as a whole. The way America produces food is inefficient, wasteful, energy intensive, fossil-fuel dependent, and a huge contributor to greenhouse gases. These problems are paired with a wealth of other environmental problems like deteriorating water and soil quality, erosion, diminishing open space, and the prevalence of poisonous chemicals that threaten human health. Though Whole Foods does its best to address several of these concerns, the corporate model also reflects assumptions and gaps that are entrenched in reductionist thinking. In this way, it faces the same critiques as those directed at the voluntary carbon offset market. Perhaps Whole Foods isn’t looking at the “Whole Picture” or addressing the root problem—that we need to eat locally, strive for equality, and remember that small is beautiful.

END OF CHAPTER 3A.

¹⁹⁴ Aldo Leopold, *A Sand County Almanac* (Oxford, UK: Oxford UP, 1949) 6.

¹⁹⁵ Arlidge.

FIGURES

Figure 1

Whole Foods Values and Mission.¹⁹⁶

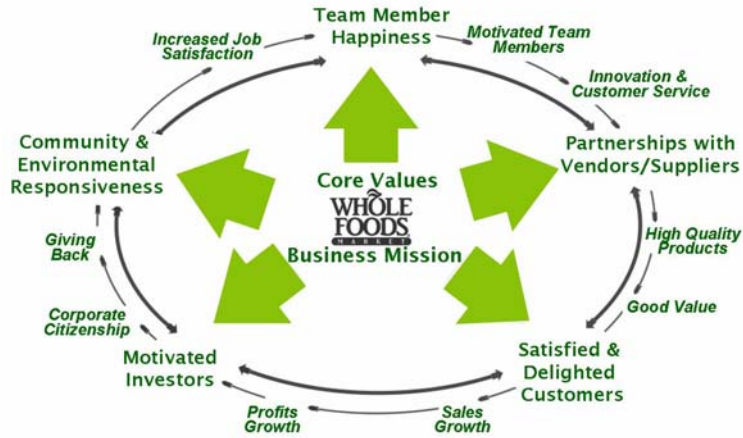


Figure 2

Mergers and Acquisitions.¹⁹⁷

- Whole Foods Market
- Whole Food Company
- Wellspring Grocery
- Bread & Circus
- Mrs. Gooch's
- Fresh Fields
- Bread of Life
- Amrion
- Merchant of Vino
- Allegro Coffee
- WholePeople.com (e-commerce subsidiary)
- Nature's Heartland
- Food for Thought
- Harry's Farmers Market
- Select Fish
- Fresh & Wild
- Wild Oats© Markets

¹⁹⁶ Mackey, "Conscious Capitalism: Creating a New Paradigm for Business."

¹⁹⁷ "Our History | WholeFoodsMarket.com," Whole Foods Market: Natural and Organic Grocery, 28 Nov. 2008 <<http://www.wholefoodsmarket.com/company/history.php>>.

Chapter 3B: Interview
Renewable Energy Credit Debate
Re-examining Whole Foods' REC Purchase

“If you can green yourself with fifteen dollars a month, then this ain't the revolution.”
– Randy Udall

I. Introduction

In conducting research on the voluntary carbon market, “one cannot help but bump into the market for REC’s.”¹⁹⁸ As articulated by Auden Schendler “corporate reputations have been burnished, if not remade, by large REC purchases, which are lauded by environmental groups, business peers, and government alike.”¹⁹⁹ In the past four or five years, corporate purchases of renewable energy have become something of an arms race. First, Whole Foods purchased REC’s for 100% of its electricity use—the biggest buy of renewable energy in corporate history. It was soon surpassed by a wave of other “green businesses”: Vail Resorts, Wells Fargo, Johnson & Johnson, Pepsi, Intel, and even the U.S. Air Force.²⁰⁰ Just this month, Whole Foods extended its commitment to purchasing offsets from renewable energy projects, “bringing its four-year total purchase to 2 million megawatt-hours of renewable energy credits from wind farms.”²⁰¹ As Auden Schendler quips, “In the case of corporate green power purchases, anytime there’s a feeding frenzy, you have to ask: what’s so tasty?”²⁰²

¹⁹⁸ Walker Wright, "How Does the Voluntary Carbon Market Relate to the US REC Market?" Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series), by Ricardo Bayon, Amanda Hawn, and Katherine Hamilton (Minneapolis: Earthscan Publications Ltd., 2007).

¹⁹⁹ Schendler, 155.

²⁰⁰ Schendler, 151.

²⁰¹ "Whole Foods Market® Announces Alternative Energy Investment, Energy Savings with New Store Designs, Existing Store Retrofits," press release, Whole Foods Market Pressroom, 21 Apr. 2009, <<http://www.wholefoodsmarket.com/pressroom/2009/04/21/whole-foods-market%C2%AE-announces-alternative-energy-investment-energy-savings-with-new-store-designs-existing-store-retrofits/>>..

²⁰² Schendler, 151.

While Renewable Energy Credits differ subtly from traditional carbon offsets,²⁰³ their implications for the ethics and stated environmental mission of Whole Foods Market are essentially subject to the same critiques. Concerns about additionality, redirected will for environmental protection, and commoditizing the atmosphere play a large role in the debate over corporate purchases of REC's, and can help us to frame the Whole Foods deal within the larger context of market approaches to climate change mitigation. In order to glean information on the logic and process behind the recent REC purchase, I sought out and conducted an interview with a company executive whose information and insights are provided toward the end of this chapter.

To analyze Whole Foods' decision to purchase Renewable Energy Credits (henceforth, "REC's") through the lenses provided by the green business and carbon offsetting debates, we must first understand what REC's are and how they differ (both ethically and practically) from traditional carbon offsets. Renewable Energy Credits (or Renewable Energy Certificates) are a particularly interesting type of carbon commodity that are extremely relevant to my case study of Whole Foods. A REC is "a certificate that represents the environmental attributes of 1 MWh of electricity from a renewable energy source. REC's can be used to satisfy regulatory mandates or to supply voluntary green energy markets."²⁰⁴ As pointed out by Auden Schendler, "If you want to buy 'green power'... you can't plug in directly to, say, a wind farm, because the infrastructure for such a connection doesn't exist. Nor do the logistics."²⁰⁵ Instead, renewable purchases typically come in the form of renewable energy credits that represent the environmental attributes of one megawatt-hour of renewable energy. To put this figure in perspective, one can consider that 1 MWh is roughly the amount of electricity it takes to run an average American home for one month.

²⁰³ For more on this subject, see Mark Trexler, "Why Do You Focus So Much on Additionality in TC + ES's Report for Clean Air-Cool Planet on Retail Offset Providers?" interview, weblog post, [ClimateBiz](http://www.climatebiz.com/blog/2007/01/03/why-do-you-focus-so-much-additionality-tces-s-report-clean-air-cool-planet-retail-offset-providers), 3 Jan. 2007, <<http://www.climatebiz.com/blog/2007/01/03/why-do-you-focus-so-much-additionality-tces-s-report-clean-air-cool-planet-retail-offset-providers>>.

²⁰⁴ Burtis and Watt.

²⁰⁵ Schendler, 152.

Unlike traditional offsets, REC's address additional externalities of fossil-fuel dependence beyond climate change. "An REC represents clean electricity, whereas an offset represents a certain amount of actual carbon dioxide kept out of the atmosphere."²⁰⁶ Their immediate purpose is not to represent reduced greenhouse gas emissions but rather to put more renewable energy into the market. As explained by expert Mark Trexler, "With REC's, the commodity is a physical and measurable unit (electricity) and the environmental attributes come along for the ride."²⁰⁷ This is because the environmental attributes of the electricity produced from renewable fuels are sold *separately* from the electricity itself, which is added to the grid where it blends with electricity from regular generators.²⁰⁸ One REC may be issued for each unit of renewable electricity produced. REC's can be converted to carbon offsets by finding the amount of CO₂ emitted by local fossil-fuel-burning power plants per kWh. For example, when the REC provider Native Energy builds a wind turbine, it would gather emissions data for local power plant emissions and find out how much CO₂ local power plants generate for each kWh of energy they produce. It then converts emissions to pounds of CO₂ reduced per kWh over a 25-year period.²⁰⁹

While traditional carbon offsets represent the purchase of a commodity that equates to a reduction in greenhouse gases, money spent on Renewable Energy credits amount to subsidies of a public good—the supply of renewable energy. The distinction, though, is subtle and according to Mark Trexler, "As long as the two commodities are kept separate they can peacefully coexist, some buyers purchasing REC's to promote renewable energy, other buyers purchasing carbon offsets to reduce their global warming footprint."²¹⁰

Compliance markets for Renewable Energy Credits are worth more than \$100 million annually. A study conducted at the beginning of 2005 estimated that the total

²⁰⁶ Ibid.

²⁰⁷ Trexler, "Renewable Energy Certificates to carbon offsets: What's the right exchange rate?"

²⁰⁸ Wright, 41.

²⁰⁹ Schendler, 159.

²¹⁰ Trexler, Mark. "Renewable Energy Certificates to carbon offsets: What's the right exchange rate?"

value of the compliance market could reach \$608 million by 2010.²¹¹ The voluntary market for REC's, like the carbon offset market, is more fragmented than the compliance market with more businesses offering a wide array of projects and products. Prices for REC's in the voluntary market are generally lower than for the compliance market and fluctuate more drastically according to each provider and project type, but according to offset expert Walker Wright, "Either way, buyers in the US increasingly are looking to both the REC and carbon markets to advance action on the intertwined issues of energy policy and climate change."²¹² Indeed, argued by Auden Schendler, REC's are being eaten up as a cost-effective way to address corporate neutrality and fossil-fuel reliance.

II. The Debate

A. The Case for REC's

As currently around 80% of the world's consumed electricity is derived from fossil fuels, some argue that REC's diversify corporate, regional, and national energy portfolios by subsidizing alternative energies. Subsidizing renewable energy is crucial because producing electricity from fossil fuels is artificially cheap and extremely polluting—particularly for climate and air quality. Unlike traditional offsets, RECs address externalities of fossil-fuel dependence beyond climate change. According to the Bonneville Environmental Foundation, "replacing an objective, independently verifiable record of the value of renewable generation... provides a far more sound basis for quantifying and commodifying carbon offsets than any subjective evaluation of 'additionality.'"²¹³ REC proponents argue that producing megawatt-hours of renewable energy directly displaces the use of fossil fuels that would otherwise be used to generate that same energy.

Other arguments for the use of REC's cite their flexibility, which "allows the consumer to support renewable energy development through certificate purchase regardless of access to green power products through retail power providers and without

²¹¹ Wright.

²¹² Ibid.

²¹³ Bonneville Environmental Foundation.

having to switch to an alternative electricity provider.”²¹⁴ Though companies like Whole Foods are far from making the drastic decision to switch power providers, they may still be inclined to support renewable energy production more indirectly through the purchase of green power certificates. Revenue from REC’s is then distributed to the utility producing the green power, providing financial support to renewable power generators in the form of a production subsidy.²¹⁵ But this seemingly sensible transfer of funds is not always as flawless and beneficial as it seems. We will now examine the critiques and concerns regarding REC’s in the voluntary offset market.

B. The Case Against REC’s

“A closer look at the REC business reveals an unfortunate truth about our nascent efforts to solve climate change—we’re charmed by the quick and easy answers, and not so much by the real and effective (but difficult) solutions.”²¹⁶ –Auden Schendler

The critiques of REC’s are similar to those directed at traditional offsets, only even those within the offset business have turned their backs on the offset’s cousin. According to Mark Trexler, managing director of Global Consulting Services at EcoSecurities and one of the world’s leading experts on REC’s and offsets, “it is quite possible that we are buying and selling large quantities of REC’s without materially affecting whether more renewable energy facilities are built.”²¹⁷ He explains that in today’s market, the question of whether a new wind farm gets built” is usually a function of natural gas prices, falling technology prices, and federal tax incentives, rather than being a function of REC sales.²¹⁸ Some REC vendors are indeed trying to make money off of corporate ignorance and desire to appear green.

As long as REC’s are sold under a forward-pricing model (where the REC’s are sold *before* a wind farm is built in order to directly provide financing for the creation of wind infrastructure), the wind farm is directly made possible by the REC sales and

²¹⁴ Wright.

²¹⁵ Schendler.

²¹⁶ Schendler.

²¹⁷ Ibid.

²¹⁸ Ibid.

therefore meritorious.²¹⁹ But according to Auden Schendler, that's not always the case. He explains that "In some instances, REC's are being bought in arrears: the wind power has already been generated. In those cases, the REC sales are a boon to the producer but they didn't make the project happen."²²⁰ This poses the question of additionality that came up in the debate over traditional carbon offsetting, and indicates a worrisome lack of clarity for those claiming to be making renewable energy possible.

Some argue that REC's simply will not be effective as an artificial market mechanism. According to Auden Schendler, "A REC doesn't represent a diversified fuel source at all, nor does it reduce a business' dependence on fossil fuels. Actual power still comes from where it always did, and fluctuates with the price of fuel."²²¹ He also theorizes that there is only corporate demand for *cheap* REC's, predicting that as the price is driven up by increasing demand for renewable energy credits under future compliance markets, "the price will go up to a point where their value drives new wind development, but at that threshold, the large-scale buyers go away."²²²

If this is the case, then REC's serve only as a cheap tool for green marketing. Mark Trexler adds to this concern, claiming that when REC's are sold separately from the environmental attributes of the renewable energy they help to fund, then it is unclear "what you're really buying through a REC if its environmental attributes have been stripped out."²²³ Though "good" REC's can often be differentiated from "bad" REC's by their prices (good REC's tend to be more expensive and actually allow new development to take place), there currently exists no standard or uniform system of REC verification.

Concerns over commoditization of nature are also at play in the debate over Renewable Energy Credits. If buying a REC gives you a property right to the environmental attributes of renewable energy, then essentially the REC market is giving humans the ability to lay claim to the atmosphere and environmental health. This

²¹⁹ Ibid.

²²⁰ Ibid.

²²¹ Ibid.

²²² Ibid.

²²³ Trexler, Mark, "Renewable Energy Certificates to carbon offsets: What's the right exchange rate?"

anthropocentric relationship was explained in Chapter 2, where Martin O'Connor argues that "In the rhetoric of 'greened growth'... people are shot-gunned or seduced into conceiving of themselves as proprietors of themselves and their habitats as *capital* which they may choose either to conserve or to proffer in the marketplace."²²⁴ While this may not necessarily be a bad thing, given that for so long environmental externalities were left off from economic cost-benefit analyses, it certainly has implications for environmental ethics and the perceived relationship between humans and the living ecosystems on which they depend.

C. Questions I had going into the Whole Foods Interview:

- 1) REC's that are necessary for renewable energy investment and development are referred to as "forward REC's" and in the opinion of Auden Schendler, "the only kind of REC that matters."²²⁵ Were the Whole Foods REC's purchased in a forward fashion? Are they good REC's or bad REC's?
- 2) "A driving reason corporations are buying REC's is that it is a very cheap way to make a major brand positioning statement. Purchasing REC's seems like a very productive use of marketing dollars. Without getting involved in the difficulties of launching new energy projects, a company can say: 'We're 100 percent wind-powered.' And such a huge statement always garners good press."²²⁶ Did the Whole Foods REC purchase garner good press? Did it intend to?
- 3) As Auden Schendler argues in *Getting Green Done*, "the act of pursuing sustainable business solutions is noble; to cover up the mistakes is criminal."²²⁷ Does the REC's purchase fall into the category of green-washing, or is it an innocent mistake?

III. Whole Foods' "Landmark Purchase": A closer look

"Central to Whole Foods Market's core values is caring about our communities and respecting the environment, and this includes adopting wise environmental practices. Purchasing wind energy credits to offset 100 percent of Whole Foods Market's electricity is a natural extension of our mission, and it shows that we 'walk our talk' with dedication to be a leader in environmental stewardship." – Michael Besancon

A. Interview

In researching the Whole Foods purchase of REC's, I was put in contact with Kathy Loftus, the Whole Foods Market Global Leader of Sustainable Engineering,

²²⁴ O'Connor, 10.

²²⁵ Schendler.

²²⁶ Ibid.

²²⁷ Ibid.

Maintenance and Energy. Kathy told me through an email that most Whole Foods decisions “are based on grass roots, majority vote type processes, where someone may be the voice for a large number of people (green mission leaders and specialists, for example) and brings the concept to executive leadership... for ultimate decision.”²²⁸ She explained many people within Whole Foods Market want to do something significant to reduce their individual footprint as well as the footprint of the company—their place of work, and that at the time the 100% offset decision was made “REC pricing was reasonable.” Though Whole Foods did not have anybody working in the energy management function at the time of the decision, Kathy and my uncle were able to put me in touch with Michael Besancon, the Senior Global Vice President of Purchasing, Distribution and Marketing for the Whole Foods.

On March 10, 2009, I was able to conduct a phone interview with Besancon, who “reports directly to Co-Presidents and Chief Operating Officers and is responsible for leading the development and execution of strategies for procurement, distribution and marketing of products...”²²⁹ Besancon, an entrepreneur and environmental advocate, chairs the Whole Foods Market National Green Mission Task Force which directs the company to implement sustainable practices. He has been instrumental in promoting sustainable agriculture, elimination of plastic grocery bags in stores worldwide, store recycling and composting programs, and most recently the purchase of Renewable Energy Credits.

B. Fossil Fuels

Through our conversation, I came to understand that the decision to purchase REC’s came mainly through Besancon, my uncle, and a few other individuals who were aided by the World Resource Institute. While the deal eventually paid off to stakeholders in terms of image and public relations, Besancon’s original intention was to reduce the company’s reliance on fossil fuels, which in turn would protect stakeholders from price volatility and the finite nature of supply in the world market through direct investment in

²²⁸ Kathy Loftus, "Re: Rec Purchase," e-mail to the author, 14 Oct. 2008.

²²⁹ "Fast Facts," Whole Foods Market Pressroom, 2009, Whole Foods Market, <<http://media.wholefoodsmarket.com/pr/wf/fast-facts.aspx>>.

wind energy. Besancon showed a clear understanding of the environmental harms of fossil fuels, explaining that “Electricity comes primarily from coal, unbelievably destructive from its extraction to its use. Anything we can reduce we will.” It was a bit surprising to hear that the “serendipitous” decision to purchase REC’s was *not* at all driven by a goal of carbon neutrality, or even intended to reduce greenhouse gas emissions. Rather, emissions-reductions were an ancillary benefit of offsetting fossil fuel use.. The intent, as Besancon explained, “was to use a renewable resource, as our operations at Whole Foods are very energy dense. We use a *lot* of energy, whether it’s natural gas or whether it’s electricity.” Besancon saw putting wind on the grid crucial to Whole Food’s long-term security in part because there is no current legal way to take yourself off the grid and thus avoid volatility in that way. This was the next best thing.

C. Timing and Cost-Effectiveness

According to Besancon, timing and cost-effectiveness were the factors that sealed the deal. Because of the low market price of REC’s at the time, purchasing REC’s was the most attractive and cost-effective option. The cost of buying REC’s to offset the entire electricity load of the company country-wide was lower than it would be to install two solar arrays on any one store, and after rebate would be less than the cost of retrofitting four or five stores at the time. From a “doing something with the stakeholder money” standpoint, the REC purchase agreement was the cheapest thing to commit to.

The decision was driven internally by a handful of Whole Foods executives, including Besancon, my uncle, and a World Resource Institute representative. According to Besancon, Whole Foods put out a request for proposal (commonly referred to as an RFP) as an invitation for suppliers to submit bids on the specific service of providing reliable offsets for the company. The company that gained the deal was “aggressive and willing to do something really pioneering.” Indeed it was, as what followed was the largest purchase in corporate history to date, excluding one by the U.S. air force. Besancon explains that the deal turned out to be “Much bigger than we thought... We were just going ‘la la la’ down the road trying to do the right thing. They put together the deal. At that point, we thought ‘We’re not going to do anything if we do it incrementally

based on rebates. We gotta do it all at once.” Besancon and his team then presented to the Whole Foods board, which conducted a vote, and subsequently gave approval to go through with the REC deal. Essentially, Whole Foods struck while the iron was hot. According to Besancon, it was a competitive, strategic and valuable move because other companies were simultaneously purchasing REC’s and because “It drove the installation of new wind tremendously.”

D. Additionality

As pointed out in Chapter Two, one of the main concerns surrounding carbon offsetting and related industries is that of additionality. When I asked Besancon how Whole Foods has addressed this issue, he assured me that the REC’s went toward the installation of “new wind,” and showed a good understanding of the arguments for the need for additionality. Besancon argued that if REC’s are not additional, “It’s just like trading stocks—once a stock is traded in the market, you just own the stock, you don’t own the company. If I buy stocks from you, I’ve done nothing for the company in increasing its capital position.” He continued on to say that “if you force additionality in your purchase, you are increasing the delivery of wind.” When I asked for more information on the wind projects themselves, Besancon could only tell me that some of them are located in Colorado and that all were made possible by the Whole Foods investment. Nevertheless, he explained, critics were unforgiving and immediately accused Whole Foods of green-washing, claiming that Whole Foods was simply trying to look good while not really putting in any effort.

Besancon referred to these critics as “tree-huggers,” as people mistrusting of carbon offsets and desirous only of internal environmental measures. Moreover, Besancon explained that because he’s “not a big offset guy” to begin with, he resents the “tree-huggers” accusation of greenwashing, etc. Though he recognizes the problems with certain types of offsets and the problematic attitudes that can accompany them, it seems unreasonable to him for these people to be “opposed to REC’s period,” no matter the thinking behind them. “They wanted a physical windmill on the store,” he explained, “I’ve had a lot of experience in Central America with Earth University, and companies

buying low quality offsets for monoculture tree plantations. This wasn't that." In fact, traditional offsets never even came up in the conversation for Whole Foods. According to Besancon, "We have not discussed the purchase of offsets. We have not looked at it. We're following a different tack there, one: reducing the number of miles, and also reducing the draw, reduction being the biggest factor." He explained that the best he can do for stakeholders is to reduce costs—and that goal can be best achieved through reducing resource use and relying on renewables for those packaging and energy needs they cannot avoid.

Even if the REC's were bought from a reliable source that uses forward-purchasing, it should be better advertised and transparent from company publications for those who are concerned about additionality and the genuine difference between these REC's and other types of offsets. Overall, the accusations of Whole Foods as a greenwashing company are not well-founded, but are legitimate in the specific concern that the REC purchase was an inexpensive way to look good.

E. The Profit Motive

Besancon admitted unhesitatingly that profit was undeniably a driving factor in Whole Foods decision, explaining that "You have to be able to demonstrate a return on investment, that this is a wise use of the stakeholder's money." Given the belief that the cost of oil at \$48/barrel today is not going to be there in the long-run, Besancon argued that it's crucial to understand that "you have a financial responsibility to the company to build in protection against price escalation and availability." His argument supports John Mackey's view of profits, which as delineated in Chapter 2 says the following:

If a business seeks only to maximize profits to ensure shareholder value and does not attend to the health of the entire system, short-term profits may indeed result, perhaps lasting many years (depending upon how well its competitor companies are managed). However, neglecting or abusing the other constituencies in the interdependent business system will eventually create negative feedback loops that will end up harming the long-term interests of the investors and shareholders, resulting in sub-optimization of the entire system.²³⁰

²³⁰ Mackey, "Conscious Capitalism: Creating a New Paradigm for Business."

In this way, the REC purchase was justified to shareholders as an investment in certificates that not only contribute to environmental health and national energy sustainability (indirectly ensuring that Whole Foods will have a more stable source of power in the long-run), but can also be resold for a profit should compliance markets drive up the price of REC's.

What's more, Besancon made it clear that ends justify the means, and that there is nothing shameful about being driven by the profit-motive to pursue environmental enterprises. He used Wal-Mart as an example, a company that has achieved huge things in the way of energy conservation and waste reduction but was driven almost entirely by cost-savings. According to Besancon, "Wal-Mart is only concerned about their bottom line; Scott's decision is 100% economic: what is the saving?" but despite its differing core values from Whole Foods, is still realizing important steps for corporations as a whole. At Wal-Mart, accomplishing zero waste will save huge amounts of money, up to \$3 billion as predicted by Besancon. The main concern for him is not a company's motivation for environmental responsibility, but rather that prices in the energy market are reflective of social and environmental realities; "When oil is at 125 dollars per barrel, people are driven in one direction, and when it's at 45 they're driven in another." Besancon argues that "You can be incentivized by doing the right thing, or you can be incentivized by cost. The end result is the same, no matter your motive. I don't care how you get there." In his eyes, like a true free market libertarian, self-interest and altruism are entirely compatible.

F. Redirected Will

The most interesting discovery for me, however, was hearing Besancon's response to my question about how the purchase has affected the company's decisions, knowing that any energy use will be offset. "Has anything changed?"

"Yes," he responded, "people's awareness." Apparently, knowing that money is being spent for each kWh used by each employee, each step in the chain of farm to fork,

has changed the overall awareness in the company about what it is that Whole Foods does. According to Besancon, “When you’ve got all this refrigeration, there’s a huge energy cost, beside the CFC’s that are released. The REC purchase is a great tool of raising awareness of team members as well as consumers.” From buyers to marketers to cashiers, awareness of energy use and its economic and environmental ramifications has moved to the front of people’s minds. Besancon explained this shift in the following:

My argument is looking out into the future and saying ‘what we’re doing today is not going sustainable five years from now.’ When you’re in a bricks and board mortar business, there’s an immediacy that causes people not to look into the future. We changed that paradigm from the immediacy of ‘this display today,’ ‘this equipment today’ to ‘what is it doing from the standpoint of the atmosphere,’ ‘what is it doing from the standpoint of energy use?’

He concluded by saying that in addition to increased awareness, the REC purchase has pushed through efficiency standards for all equipment and in-store processes. This includes LED lighting, better refrigeration practices (i.e. closed cases that conserve cold air), and other energy-saving technologies.

G. Final Thoughts

“Businesses that buy REC’s without understanding them (and that are therefore often making a worthless investment) aren’t necessarily deceitful or disingenuous. CEOs purchasing REC’s generally feel that this is an important and valuable action. In fact, if you want to buy green power today, REC’s are really the most obvious and accessible way to go about it. And businesses should not be expected to be experts on renewable energy. At the same time, due diligence on REC’s is critical if you want to protect corporate reputation.”²³¹

Finally, when I asked what a sustainable business looks like to him, what he envisions for Whole Foods in the future, Besancon answered that “The big goal would be to be energy independent. To reduce the draw, reduce the actual usage, to the point where solar, wind, other tools (I prefer fuel cells that are driven by hydrogen from water rather than from natural gas) are enough.” On one hand, the key is to become carbon neutral, but from a pure business standpoint it is to protect stakeholders against fluctuations and permanent spikes in the cost of energy. Besancon anticipates that these changes “could

²³¹ Schendler.

happen any moment.” One of the obstacles to achieving the goal of energy independence is that most municipalities do not allow individuals or businesses to go off grid. Besancon clarified that “All our electricity in California generated by solar is done before the meter. It reduces the draw through the meter, but you’re not allowed to disconnect.”

Because of this, “REC’s are a stopgap.” Besancon noted that “The REC’s fill the gap between the need and technological advance. To put on our 30,000 sq foot store in Woodland hills, to put a solar array that provided 25% of energy from store at best, the gross cost before rebates was almost 1 million dollars. We’re not spending 28 million to get 25% at best.” REC’s, if they are of good quality, drive more renewables into the greater grid. “This is something you do,” he asserted, “but it’s not the solution. This is where I had problems with treehuggers and the rest. They say, ‘If it’s not perfect, I don’t support it.’ I say ‘You gotta start somewhere!’” Looking forward, Besancon is optimistic about renewable energy technologies and their place in our national economy. With the new Obama administration in office, he claims that “all bets are off.” With a rise in investment for nanotechnology, microscopic solar cells, and other advances in wind and solar power, Besancon believes that amazing new things can be done through business. “Instead of the government subsidizing corn, or oil, they’ll subsidize the solar technology on my roof.”²³²

H. Lessons and Questions

Things I learned:

- 1) REC’s were cheap at the time.
- 2) The decision was intended to reduce reliance on fossil fuels, which are unsustainable and therefore a risky energy source to depend upon.
- 3) PR was an afterthought. In fact, many have been critical of the purchase and accused Whole Foods of greenwashing.
- 4) The purchase increased awareness about energy use and climate change within the company itself.
- 5) Profit and cost-effectiveness were always the determining factors—if it couldn’t be justified to the stakeholders, it couldn’t have happened.

²³² Michael Besancon, "Interview with Senior Global Vice President of Purchasing, Distribution and Marketing for the Whole Foods.," Telephone interview, 10 Mar. 2009.

Leftover Questions:

- 1) Does this mean there are not tradeoffs between profitability and environmental responsibility? Besancon made it sound so easy: good for us, good for stakeholders, good for the environment. But what about the adage, “Running a business with ideals is like driving with the brakes on?” What would happen in a case where profit and environmental responsibility were mutually exclusive?
- 2) What about redirected will? Within the company, employees have been made more aware. But what about consumers? Do their attitudes change or do they just feel even better about their consumption? Can feeling good about how you shop be a bad thing?
- 3) What about the fact that the REC’s were cheap when they bought them? Is that because they didn’t use a forward-pricing model? Typically, low-priced REC’s mean they are of lower quality.
- 4) From whom did Whole Foods purchase their credits? I can’t find it anywhere and Besancon couldn’t remember the name, but if it was Native Energy or Community Energy, they would probably be legitimately driving new wind.
- 5) Are there better ways to protect the climate? Schendler suggests directly funding wind farms, spending money on lobbying, or developing ways to generate clean power using methane, a highly potent greenhouse gas that is currently vented from coal mines. As Schendler inquires, “Are REC’s merely the indulgences we buy to escape the twenty-first-century environmental inquisition?”²³³

IV. Conclusion: Efficacy and Ethics

“Climate change isn’t about marketing, it’s not a...bragfest... Whole Foods won’t be carbon neutral until Wal-mart and the rest of the nation’s big boxes are; that is, it won’t be carbon neutral until we have radically transformed the entire energy infrastructure on which we depend... This is the work of the next few decades, maybe the next few generations. It’s not a marketing stratagem, a contest, a parlor game, a cheap trick.”²³⁴
—Randy Udall

“While it would be technically feasible for a company to achieve neutrality through a strategy of 100 percent offsetting, or through the purchase of a sufficient number of renewable energy certificates, such actions do not represent the spirit of leadership embedded in the term. True climate leadership is indicated by companies rethinking their business strategy; engaging deeply with – and educating – their suppliers, customers and peers; and developing products and services that will thrive in, and help bring about, a low-carbon economy.”²³⁵
— Getting to Zero CleanAir-CoolPlanet Report

²³³ Schendler.

²³⁴ Ibid.

²³⁵ Burtis and Watt.

As a large corporation, Whole Foods faces immense challenges. Finding truly sustainable and natural ingredients and products frequently requires sourcing from around the globe, and maintaining a stable supply chain as new stores open and production increases puts a strain on the integrity and quality standards Whole Foods sets for itself. The rapid increase in consumer demand for healthy food has put pressure on the corporate executives, as have requests for more and more progress in the realm of environmental and social responsibility. Whole Foods, and other green businesses, must find solutions to these challenges if it wishes to remain true to its stated core values and mission statement.

While these challenges are all difficult to meet in a competitive market, Whole Foods has certainly done better in this area than most other corporations of its size. The REC purchase, at the very least, shows that Whole Foods recognizes the limitations of being a large company and is attempting to address the associated environmental concerns of its employees, stakeholders, and customers. While there is no way Mackey can personally keep an eye on all of his employees or suppliers personally to ensure integrity throughout his immense organic kingdom, the growth of his business has influenced growers and competing food chains to try to do better for the environment. The good things about going big are influence on suppliers, widespread availability of organic food to those who might not have been aware of its benefits, and the ability to demonstrate of a better way of doing business profitably. We are not going to solve climate change if only a few privileged individuals go to the store with their canvas bags and purchase a few organic items. It will take large, far-reaching efforts on the part of the goods and service providers we come into contact with on a daily basis. If it takes size to make a difference, then so be it.

Even in moving from small to big, Whole Foods has maintained a good deal of its ethical and business mission through intentional practices, thus avoiding many of the pitfalls that so many corporations fall into in trying to “go green,” or just “appear green.” According to Greenbiz writer Christina Inge, “Having a strong corporate philosophy that emphasizes key sustainability concepts is vital to staying green during periods of

growth.”²³⁶ Mackey’s genuine concern for running an ethical business seems to have carried the company profitably throughout its growth period without sacrificing much in the way of environmental integrity. For Whole Foods, a combination of internal marketing geniuses, external criticism, and timely opportunities has allowed for some good things to happen. Through its purchase of Renewable Energy Credits, Whole Foods employees from the CEO right down to the cashiers have presumably learned a valuable lesson about the climate and energy impact of refrigeration, transportation, and food processing as a whole.

Equally as encouraging is the recent report from the UN Environment Program that found that financial markets invested close to \$150 billion in the renewable energy and energy efficiency sectors in 2007, a 60% increase from 2006.²³⁷ (See Figure 1) In 2008, the U.S. wind energy industry “shattered all previous records by installing over 8,500 megawatts of new generating capacity.”²³⁸ New wind in 2008 put enough renewable energy into the grid to serve over 2 million homes, and increased the country’s total wind capacity by 50%. More importantly, the new wind projects account for over 40% of all power capacity added last year in the nation—the implications of which are huge for climate change mitigation because the more clean energy in the market, the less the U.S. relies on fossil fuels. Whether or not REC revenue has resulted in proportional increases in wind development, it certainly is responsible for a large part of the leap in investment in renewable energy in the past few years.

Though our current economic system is still far from the point where businesspeople sit around a table and discuss ideas on how to provide a good or service that would help people, that would fulfill some kind of basic need or joy, it could be that the climate crisis is slowly beginning to bring us back to consciousness. John Mackey seems to remember that the point of business to increase the efficiency and quality with which we provide people with their human needs and desires.

²³⁶ Inge.

²³⁷ UN Environment Program, Global Trends in Sustainable Energy Investment 2008: Analysis of Trends and Issues in the Financing of Renewable Energy and Energy Efficiency (2008).

²³⁸ “2008: Another Record Year for Wind Energy Installation,” American Wind Energy Association, 20 Apr. 2009 http://www.awea.org/pubs/factsheets/Market_Update_4Q08.pdf.

That being said, the Whole Foods case study still does not fully convince me that capitalism can be green. As environmental consultant Auden Schendler admits, “Cutting CO₂ emissions is difficult, even for a motivated business or municipality.”²³⁹ REC purchases are making “going green” seem too easy. While the capitalist system in the U.S. has indeed produced Whole Foods and others like it, there’s by far a larger share of the market that does *not* hold conservation and human rights to basic resources at the center of its actions. Or, as Schendler argues, “businesses cherry-pick the projects that save the most energy at the lowest cost but pass on the deeper emissions cuts necessary to solve the climate problem.” This critique can help explain why so many, including Whole Foods, opt for off-site environmental responsibility achievements without doing anything that could hurt the bottom line. Perhaps it is too much to ask that Whole Foods completely steps out of the milieu in which it operates by thinking only of the environment and nothing of itself. But in the end, climate change is too serious of an issue for us to avoid having real conversations about our energy systems and the American way of life. This challenge not require reforms. It’s going to need a revolution.

Even though the Whole Foods anecdote showed that REC purchases can have the ancillary benefit of increased awareness within the company, the issue of redirected will is a real one for green business as an entity. Money currently spent on REC’s could be better spent on other sustainability measures. Additionally, for those looking for a real alternative to industrial food supply, Whole Foods and other corporate organic food providers may be more of an appeasing force than a true revolution in the way Americans eat. While the food is healthier, pesticide free, and sometimes local, people still do not see where their food is coming from, nor do they truly address the issue of self sufficiency. The environmental justice issue is another unsolved problem. Those who would never farm or don’t have the leisure to do so probably can’t afford Whole Foods products anyway, and thus even the “better than Safeway” factor isn’t really better for a large demographic. My experience of seeing homeless black folks out in front of the Berkeley Whole Foods on Telegraph Avenue emphasizes the reality of race and class as

²³⁹ Schendler.

determining factors of access and participation in communities that Whole Foods enters into. While rich people take joy in their organic fair trade granola, low-income and homeless people are untouched by the alternative nature of the products—in an unfair society, their environment and health are no better off than were they to stand outside Wal-Mart begging for a dime, or a new paradigm.

In many ways, the American agricultural/food entity is only as strong as its weakest link. Whole Foods won't be carbon neutral until Wal-Mart and the rest of the nation's big boxes are; that is, it won't be carbon neutral until we have radically transformed the entire energy infrastructure on which we depend.²⁴⁰ Factory farms and globalized supply chains will remain in place until there is no longer enough players willing to keep the wasteful and unethical chain going. Pioneers are inspirational, but require an unimaginable amount of hard work and self-examination as well as initiative and research. They face immense critique: both from those who have interest in the status quo as well as those who claim that "better is not good enough." Many who are willing to do the hard work are often held back by uniform regulations designed to fit a wasteful and unimaginative community. Bureaucracy gets in the way, and false solutions lurk at every corner. Until prices rise to a permanently deterring level, most companies will continue to do minimal real work in favor of easy outs for PR because that's what is currently easiest and most obvious in our system. This is why policy change is so important for the issue of climate change—the price of pollution must rise to a level that reflects environmental realities.

Predictably enough, the profit motive has only proved to be compatible with environmentalism/renewable energy under certain (unlikely) assumptions, and in a fairly superficial way. Though Whole Foods has engaged a good conversation about fossil fuels into the climate change discourse, and has proven its commitment to moving away from waste and unsustainable business inputs wherever possible, it remains unclear to me what Whole Foods would do in the case of a tradeoff between profitability and environmental responsibility. But it almost doesn't matter, because they have found ways to do both in

²⁴⁰ Schendler.

the realm of greenhouse-gas emissions and fossil-fuel consumption. Their efforts to implement maximum efficiency in all areas of the business and Besancon's clear understanding of what constitutes greenwashing, as well as his logical explanation that you have to start somewhere, indicate a good sign for Paul Hawken's theory of symbiosis between smart business and sound environmental practices.

In this chapter, I have investigated the structure, approaches, mindsets, etc. of Whole Foods as well as the challenges, costs, and areas of weakness that came up. It takes a strongly committed business to stick by its environmental mission even when it becomes economically difficult to do so. In *Getting Green Done*, Auden Schendler explains that without carbon regulation, either through taxes or a cap-and-trade system, business will always default to profit at the expense of climate stability, "because it costs nothing to pollute."²⁴¹ He uses the example of Suncor Corporation, whose "climate-saving aspirations went out the window" as soon as the price of oil hit a certain threshold, choosing to relinquish its position as "the most progressively green oil company on the planet to one of the worst violators in history."

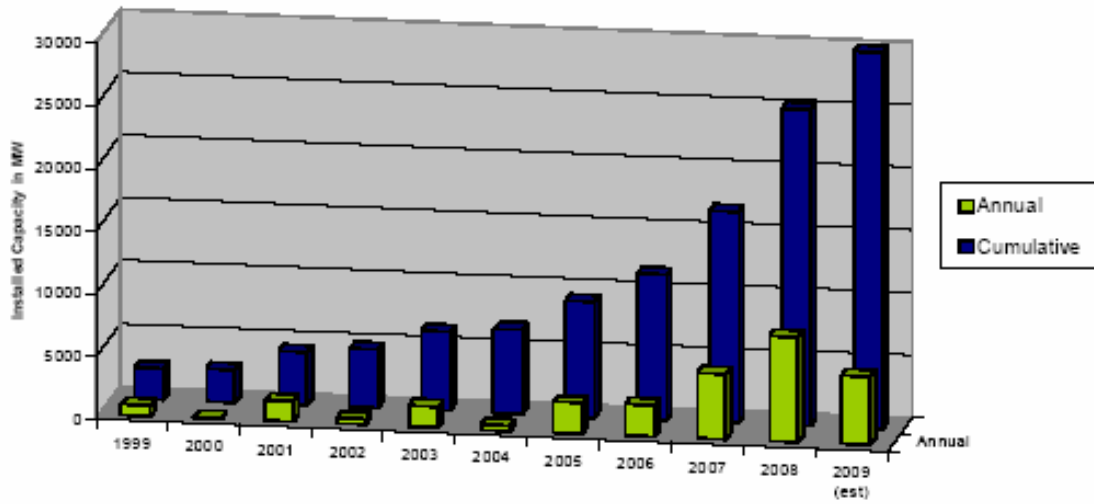
While this does not make business inherently bad, it illuminates the limits that exist within the corporate approach to climate change mitigation. To put this in context, I will now examine a non-profit based organization aiming to achieve the same sorts of effects but through a more community-based and ethic-driven approach. The aim is to generate insight on the difference between alternative consumerism and anti-consumerism, in both ethics and practice. If successful, these sections should get at the question of the value of capitalist responses to environmental crisis and attempt to address the following question: "Is capitalist production, distribution, exchange, consumption, and accumulation consistent with ecological sustainability?" (*Is Capitalism Sustainable?* by Martin O'Connor)

END OF CHAPTER 3B.

²⁴¹ Schendler.

FIGURES

Figure 1
Growth in Wind Energy over the past decade²⁴²



²⁴² "2008: Another Record Year for Wind Energy Installation."

Chapter 4: Case Study

Growing Power

Nonprofit Alternative to Green Business

“Food security depends more on socio-economic conditions than on agroclimatic ones, and on access to food rather than the production or physical availability of food.”²⁴³
—UN Food and Agriculture Organization

I. Introduction

The philosophical opposite of the corporation is the cooperative. While neither is inherently better than the other, there are distinct differences that lead to specific advantages in addressing the archetypal concerns of environment and social justice. Rather than attempting to increase the general well-being through profit that can be distributed amongst shareholders, the ideal co-op provides services to all its members through equal ownership and participation. In the provision of food services, co-ops and other forms of communally owned and operated operations have represented the non-profit sector by acting upon the philosophy that affordable healthy food is a universal human right. While Whole Foods provides premium quality goods and services to those willing to pay the market price for them and achieves sustainability through minimization of overhead costs, it is by nature required to justify all environmental and ethical decisions with cost-savings and increased revenue. Non-profit food providers typically answer to nothing other than the values that drive them forward.

According to Vandana Shiva, “localized, biodiverse ecological agriculture can reduce greenhouse gas emissions by a significant amount while improving our natural capital of biodiversity, soil and water; strengthening nature’s economy; improving the security of farmers’ livelihoods; improving the quality and nutrition of our food; and deepening freedom and democracy.”²⁴⁴ Citing studies conducted by Paul Hepperly of the Rodale Institute (2003) and the MAFF Project (1996-2000), she claims that “a shift to ecological, non-industrial agriculture from industrial agriculture leads to a two-to seven-

²⁴³ FAO, 2003b: 365-366.

²⁴⁴ Vandana Shiva, *Soil Not Oil: Environmental Justice in an Age of Climate Crisis* (Cambridge, MA: South End P, 2008).

fold energy savings and a 5 to 15 percent global fossil fuel emissions offset through the sequestration of carbon in organically managed soil. Up to four tons of CO₂ per hectare can be sequestered in organic soils each year.”²⁴⁵

The need for localized agriculture is clear. This chapter will examine the goals, history, and environmental ramifications of local cooperative food programs, and analyze them in the context of capitalist approaches to climate change. It will also focus on an example of nonprofit food programs that address climate change and food justice through grassroots organizing and location within target communities. That offsetting is rarely necessary here is the basic premise I start with, and so I examine the alternative ways a food provider can go about protecting the atmosphere and the environment.

II. Background

The origination of the organic movement came in response to large-scale, petrochemical-reliant agriculture whose dark side was revealed by environmentalists like Rachel Carson. Around the world, a reactionary movement sprung up in the 1900’s to combat the new trend of boosting crop yields through chemical fertilizers and pesticides that had been developed during World War I as weapons of mass destruction. These new technologies allowed food to be produced on a larger scale, but resulted in harmful environmental externalities like contamination of groundwater, illness in agricultural workers, the development of pest resistance, and air pollution. They also replaced human labor with intensified production practices. Though organic pioneers recognized the benefits of technological progress, they were unwilling to sacrifice environmental health for the sake of greater production. Organic food was invented, thus, “not out of a blind yearning for an agrarian past, but as a reaction to new agricultural methods and materials whose purpose was to raise output and yield.”²⁴⁶

²⁴⁵ Ibid.

²⁴⁶ Samuel Fromartz, Organic, Inc: Natural Foods and How They Grew (Orlando, FL: Harcourt, Inc., 2006).

Sir Albert Howard, a British agricultural scientist, was one of the first to develop composting as a means for maintaining healthy soil and turning out healthy crops. The Rodale Institute, founded in 1947 in Pennsylvania by J.I. organic pioneer Rodale, who was greatly influenced by Howard, and put out the first widely distributed publications on the benefits of organic farming, including the *Whole Earth Catalog* and later *Organic Gardening* (1942). As these publications promoted the simple yet revolutionary idea of creating soil rich in nutrients and free of contaminants, people began to listen and acceptance grew.²⁴⁷

In the original ideal, an organic farm was a small family or community-run enterprise that set standards for environmental responsibility, self-sufficiency, social justice, and the ethical treatment of agricultural animals.²⁴⁸ There was also a spiritual component of organic farming and gardening. Sir Howard himself was influenced by “the Eastern spiritual concept of the mandala, in which any sphere of life is connected with all others,” and by Rudolf Steiner’s book *Spiritual Foundations for the Renewal of Agriculture* which popularized the philosophy of biodynamic agriculture. According to Samuel Fromartz, “organic farming has thrived in large part on the highly practical methods that originated with spiritual and idealistic motivations.”²⁴⁹

Today, alternative food providers that remain loyal to original organic ideals are somewhat rare. Since organic farming has been drastically altered by its popularization and expansion, many environmentalists no longer feel that purchasing organic food is equivalent to supporting the organic ideal. Cooperative farms and food retailers make up a tiny percentage of farm acreage and type in the United States, making food produced under the original organic ideal hard to come by. According to an agricultural study, in 1997, only 0.8% of all farms were operated by coops or institutions and accounted for a mere 7% of total U.S. farming acreage. Though corporations do not comprise a large part of the U.S. farming sector (most farms are actually small and family-owned), big seems

²⁴⁷ "About the Rodale Institute: History | Rodale Institute," Rodale Institute, Leaders in Organic Solutions for Global Warming, Famine Prevention, and Nutrition since 1947 | Rodale Institute, 22 Mar. 2009 <<http://www.rodaleinstitute.org/history>>..

²⁴⁸ Pollan.

²⁴⁹ Fromartz, 12-13.

to be a pattern in the food industry as a whole. According to the same agricultural study, establishments in the retail-food industry nearly quadrupled in size from the 1950's to the 1990's as judged in real sales per establishment.²⁵⁰ To purchase food from a small, community based store like the one John Mackey used to run in Austin Texas tends to be expensive and rare.

I will now examine a case study, however, that exemplifies a non-profit model that offers both community integrity as well as affordable healthy food. Through Growing Power, we will be able to see benefits and differences or a nonprofit food producer/retailer highlighted through an on-the-ground example of alternative food production.

III. Case Study: Growing Power

"If people can grow safe, healthy, affordable food, if they have access to land and clean water, this is transformative on every level in a community. I believe we cannot have healthy communities without a healthy food system." – Will Allen

A. Introduction

Growing Power is a national nonprofit and urban land trust—a legal mechanism of community-ownership frequently used for conservation easements—that serves as an excellent example of the climate-friendly alternatives to green-business approaches of providing food. Founded in 1995 in Milwaukee, Growing Power aims to transform urban Midwest communities by “supporting people from diverse backgrounds and the environments in which they live through the development of Community Food Systems,” which provide “high-quality, safe, healthy, affordable food for all residents in the community.”²⁵¹ Through training, demonstrations, outreach, and technical assistance, Growing Power helps people to grow, process, market and distribute food sustainably. It also establishes urban Community Food Centers, which draw from, and provide services to, the local food-shed. Its farms are established on reclaimed vacant city lots and are

²⁵⁰ Milton C. Hallberg, Economic Trends in U.S. Agriculture and Food Systems Since World War II (Ames, IW: Iowa State UP, 2001).

²⁵¹ Growing Power, 28 Apr. 2009 <<http://www.growingpower.org>>.

designed to “create dialogue, community engagement, and empowerment as well as introduce a source for fresh, safe, healthy, homegrown produce to the community.”²⁵²

Like the term “corporate organic,” urban gardening may at first appear to be an oxymoron. But unlike corporate organic schemes, the philosophy of urban gardening actually answers quite accurately to the values of the countercultural organic movement that sprung up in response to industrial farming. As articulated by Joan Dye Gussow, a nutrition activist, author and farmer, in the September/October issue of *Organic Gardening* “When we said organic, we meant local. We meant healthful. We meant being true to the ecologies of the regions. We meant mutually respectful growers and eaters. We meant social justice and equality.”²⁵³ In the case of Growing Power, the environmental and social benefits of urban gardening are immense and timely.

The populace of poor, urban areas have systematically limited or zero access to nutritious and safe food. Inner-city residents often have to rely on small convenience stores with very few nutritious offerings for daily food because it is uncommon for grocery stores to locate in neighborhoods where they cannot turn a profit. As “white flight” (the departure of upper and middle class families from newly desegregated neighborhoods) occurred throughout the 20th century, urban infrastructure fell apart and grocery stores fled these neighborhoods. This left many urban low-income and minority neighborhoods facing food insecurity up until today.²⁵⁴ The Milwaukee neighborhood in which Growing Power’s first farm is located is the epitome of these low-income underprivileged communities. Ninety-six percent of the residents are African American, almost 40 percent are under 18 (many of whom are unemployed), and over 30 percent live below the national poverty line. Into this community of gang violence, foreclosed

²⁵² “Chicago Farms,” *Growing Power*, <<http://www.growingpower.org>>.

²⁵³ Kim Severson, “Agribusiness Goes Organic,” *San Francisco Chronicle Online* 13 Oct. 2002, <<http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2002/10/13/MN242010.DTL>>.

²⁵⁴ Dorceta Taylor, “The Rise of the Environmental Justice Movement: From Toxics to Green Jobs,” *The Rise of the Environmental Justice Movement: From Toxics to Green Jobs*, Pomona College, Claremont, CA, 23 Apr. 2009.

homes, and junk food joints came Growing Power—offering something new and open to everyone.²⁵⁵

Growing Power grows an abundance of food on small plots of land that minimize environmental impact, and provides to local stores, restaurants, farmers markets, and families with very little energy use for transportation. At the same time, it addresses social inequalities by providing about “\$500,000 worth of affordable produce, meat and fish for the ‘food deserts’ of American cities, where the only access to food is corner grocery stores filled with beer, cigarettes and processed foods.”²⁵⁶ According to Jerry Kaufman, the President of the Growing Power Board of Directors, grassroots organizations like Growing Power are more important than ever because “an economic recession is upon us and a global warming crisis looms ominously.”²⁵⁷

B. Will Allen, CEO

Growing Power’s Chief Executive Officer Will Allen is a fascinating counterpart to John Mackey. His story is equally, if not more, interesting. While their philosophies converge in several ways (namely the value placed on healthy food options, avoidance of pesticides, and community improvement through environmentally-friendly food systems), Mackey and Allen’s approaches and targeted populations differ significantly. Just as there is a lot to be learned about Whole Foods from its ethical guide John Mackey, there is no way we can ignore the immense effect had by Director and Founder Will Allen on Growing Power. Though he’s never lived on a vegetarian co-op, Allen’s ideals are what give inspiration to the whole operation and his work ethic is famous to all those who know him. For these attributes, Allen recently won the prestigious MacArthur Genius Award.

²⁵⁵ "Award Recipients: Will Allen," Leadership for a Changing World ([leadershipforchange.org](http://www.leadershipforchange.org)), <<http://www.leadershipforchange.org/awardees/awardee.php3?ID=303>>.

²⁵⁶ Barbara Miner, "An Urban Farmer is Rewarded for His Dream," New York Times Online 25 Sept. 2008, <<http://www.nytimes.com/2008/10/01/dining/01genius.html>>.

²⁵⁷ Jerry Kaufman, "Letter to Friends," Growing Power, 5 Nov. 2008, <<http://www.growingpower.org>>.

Allen grew up in rural Maryland in a poor farming family.²⁵⁸ His father was an illiterate labor worker who kept a large garden to feed the family and visitors, and his mother worked as a housekeeper to make a living. Before he was growing gardens on abandoned concrete basketball courts in Chicago, Allen played basketball at the collegiate level on the courts of the University of Miami, and later played professionally in the American Basketball Association and in Europe. Allen, like Mackey, spent time in the corporate world as a marketing employee for Procter & Gamble and Marcus Corp, but unlike Mackey decided he was unsatisfied after only a decade.²⁵⁹

The impetus for establishing Growing Power came from Allen's recognition that "inner-city youth have very limited access to fresh, safe, and healthy food or the knowledge to prepare it," and his desire to do something about it.²⁶⁰ Allen claims that he purchased the land for the Milwaukee farm in 1993 "for totally selfish reasons," in that he was a small business-man trying to find a busy location where he could sell his produce. After spending time talking to the people who frequented his neighborhood, Allen realized that he could provide a much-needed service—particularly to the youth who didn't have a lot to do outside of school. Allen began showing kids how to grow vegetables, and realized that food and farming could be real tools for social change. Though he didn't study Social Justice or Environmental Studies in college, choosing instead of focus on Physical Education, he was able to connect the societal need for healthy food with the services he could provide. Growing Power was established as a nonprofit in 1995 and since then has provided hands-on educational programs and "transformed the cultivation, production, and delivery of healthy foods to underserved, urban populations."²⁶¹

Allen's management style is quite simple. Unlike Mackey, Allen does not spend time blogging from a corporate office, nor does he spend his free time relaxing on a 720

²⁵⁸ Jacob Wheeler, Growing Power, <<http://www.growingpower.org/Chicago%20Boasts.pdf>>.

²⁵⁹ Karen Herzog, "A will and a way for Allen," Journal Sentinel [Milwaukee, WI] 6 Oct. 2008, Journal Sentinel Online, <<http://www.jsonline.com/news/milwaukee/32467114.html>>.

²⁶⁰ "Award Recipients: Will Allen," Leadership for a Changing World ([leadershipforchange.org](http://www.leadershipforchange.org)), <<http://www.leadershipforchange.org/awardees/awardee.php3?ID=303>>.

²⁶¹ Herzog.

acre ranch. Allen is “a hard worker, and he doesn’t take excuses for not getting the job done,” according to one of his staff, who goes on to explain that Allen’s management style is “Will’s Way.”²⁶² Allen, who like Mackey believes in teamwork, does not in any way seem the type to waste time sitting indoors. Rather, he spends all available time in the field supporting his team. “He has been known to whip up a breakfast of yellow squash and zucchini omelets after employees unload a produce truck at 3 a.m., or to make fried catfish and fried green tomatoes for the whole staff just because he’s hungry.”²⁶³

Allen also considers himself a coach. “My background is over 40 years as a farmer with a background in team sports, having played high school, college, and professional basketball. I truly believe in the concept of teamwork, with each team member playing an important role to achieve goals.”²⁶⁴ To create an effective team, Allen works with his staff to develop skills. “Then,” Allen says, “I let the staff do their work, letting them know I’m there to support them.”²⁶⁵ Allen has expressed a strong commitment to nurturing the next generation of leaders, and has purportedly stays connected to his daughter Erika (who directs the Chicago branch of Growing Power) to keep updated on “what she and her peers are saying and thinking in terms of the community-food-system work, ideas that are innovative and fresh.”²⁶⁶

IV. Principles and Methods

A. Big → Small, Centralized → Decentralized, Global → Local.

“New generation of farmers not gonna come from rural communities, they’re not gonna come from traditional farm families—those things don’t exist in our farm systems anymore. These new farmers are gonna come from folks that live in the cities.”

– Will Allen

The critiques of large scale food producers were covered in Chapter 3A, and as we saw in the Whole Foods offset purchase, the company’s size was in part responsible

²⁶² Ibid.

²⁶³ “Award Recipients: Will Allen.”

²⁶⁴ Ibid.

²⁶⁵ Ibid.

²⁶⁶ Ibid.

for the need to address energy source through an indirect transaction rather than immediate on-the-ground work. The touted benefits of small-scale systems have not yet been explicitly stated, but are clearly demonstrated by Growing Power and its programs. In a small and community-based organization, every operation can be watched over and maintained for integrity, justice, and effectiveness.

Under the Growing Power model, farmers are connected to vendors, vendors are connected to “consumers,” and consumers are connected back to the farmers. In fact, the “consumer” is not merely a consumer, but rather a player in the cycle of planting, growing, harvesting, selling, and returning. Since the person eating the food reaps the benefits from his or her own work or sponsorship of the community program, there is incentive to maintain health and environmental standards. If the soil is ruined by high salt levels or overgrazing, there will be no food for the “consumer” to eat. He or she has a direct investment in the land and the environment. This is the complete opposite of out of sight out of mind mentality fostered by large industrial food systems that Whole Foods opposes, but inevitably adopts in order to maintain low costs and economies of scale.

On average, American food travels 1,300 miles from farm to supermarket. Most states in the U.S. buy 85% of their food from outside their borders.²⁶⁷ What non-profits like Growing Power attempt to redress is this long distance relationship Americans maintain with their most crucial fuel sources: food and the energy it takes to bring it to them. As Vandana Shiva argues, there is no way we can develop a sustainable food system without moving away from the large-scale, agrochemical-reliant and fossil-fuel-dependent model in favor of small and local community—and according to Will Allen—urban farming. Though corporations like Whole Foods are genuine in their efforts to reduce their ecological footprint, the truth is that there’s no way a big corporation as we today conceive of it will ever reach zero emissions because of its need for economies of scale and energy offsets. Like Michael Besancon admits, Whole Foods will not put a windmill on top of every store—though several stores do have impressive solar arrays.

²⁶⁷ Cathy Roth, "Community Supported Agriculture," Vegetable Program, 2008, UMass Amherst, <http://www.umassvegetable.org/food_farming_systems/csa/index.html>.

Rather than attempting to draw people to food (as Whole Foods does by planting themselves in the middle of wealthy communities and banking on brand recognition and marketing outreach strategies), Growing Power goes into communities and organizes community members around the work that it does—which is growing food in healthy and sustainable fashions. While some might think that returning food to small-scale operations requires going “back to the land” and returning to a more rural, pastoral life, Growing Power is completely compatible with modern urban settings and has helped to provide density by filling in abandoned city lots. Allen’s holistic farming model relies on food distribution networks that are local, small, and honest. According to Allen, “You have to figure out how to grow food closer to where people live... We are in a worldwide food crisis and worldwide energy crisis.”²⁶⁸

B. Nonrenewable → Renewable

The recognition of agriculturally induced climate change—and the associated need to reduce greenhouse gas emissions and the use of fossil fuels—did not arise until recently. However, Growing Power and other nonprofits have quickly stepped up to lead the way in developing climate-friendly modes of food production. For smaller non-profits like Growing Power, carbon offsetting is neither a possibility nor a necessity. No extra funds or profit are ever available to be invested in unnecessary projects like Whole Foods’ REC purchase, since all money is going toward salaries and operations. Neither are they needed, as the quintessential non-profit food operation does not generate the type of emissions that corporations like Whole Foods through warehouses, in-store electricity use, transportation, and storage produce.

Instead, non-profits use other means to achieving sustainability in energy supply. Moving from nonrenewable to renewable sources of fuel for food production is a central objective of a design science referred to as permaculture. According to Dale Allen Pfeiffer, permaculture does the following:

²⁶⁸ Herzog.

Permaculture uses natural systems as the model for creating productive systems with the resilience, diversity and stability of natural ecosystems. Based on the foundational ethics of earth care, people care and return of surplus (fair share), permaculture works as a linking science with a set of core principles derived from nature. The outcome of good design is to minimize our footprint through efficient and harmonious use of resources in the creation of systems that are mutually supportive of key functions or needs.²⁶⁹

Resting on the foundations of biomimicry (a fundamental concept of Paul Hawken's theory of natural capitalism), permaculture is very difficult to carry out without careful attention to nature's processes and an intimate connection at every level with the land. In the discourse of climate change mitigation, permaculture is the ultimate aspiration because of its ability to work in balance with nature rather than against it. Permaculture is beyond carbon-neutral: it is actually *restorative* and will undoubtedly play a crucial role in any move to turn back the clock on anthropogenic climate change. Using natural means to grow food eliminates reliance on fossil fuels in exchange for living energy that is restorative for life.

The Growing Power Milwaukee farm is a hands-on agricultural training facility where community members can train in "horticulture, aquaculture, poultry raising, beekeeping, vermiculture (worm castings), land conservation, food processing, and marketing."²⁷⁰ Not only does it train community members in ecological agriculture, but Growing Power also runs six greenhouses, an apiary, poultry houses, livestock (grass-fed and raised in large outdoor pens), a worm depository, a compost operation, a small store where its products are sold at fair prices, and an anaerobic digester that produces energy from the compost. During winter months, Growing Power produces spinach, arugula, and other salad greens in outdoor "hoop houses" ("A hoop house is just what the name suggests, a series of large hoops or bows — made of metal, plastic pipe or even wood — covered with a layer of heavy greenhouse plastic that is heated by the sun and cooled by

²⁶⁹ Dale A. Pfeiffer, Eating Fossil Fuels: Oil, Food, and the Coming Crisis in Agriculture (Gabriola Island, BC: New Society, 2006).

²⁷⁰ "Award Recipients: Will Allen," Leadership for a Changing World ([leadershipforchange.org](http://www.leadershipforchange.org)), <<http://www.leadershipforchange.org/awardees/awardee.php3?ID=303>>.

wind²⁷¹) that it heats with a combination of solar energy and waste heat from its compost piles.²⁷² Through creativity and dedication to doing things their own way, Allen and Growing Power have managed to ensure that they can grow food without the help of fossil fuels—making a strong statement for those who look to them as a model of environmentalism and self-sufficiency.

Allen's future aspirations involve going even more off the grid. He explains that he'd eventually like to build a five-story vertical farm for Growing Power, which would offer a larger retail store, headquarter offices, classrooms and be "totally off the grid with renewable energy, where people can come and learn, so they can go back to their communities around the world and grow healthy food." He also wants to build a system that would help convert food waste into methane, a renewable energy source.²⁷³ Overall, it seems that Growing Power maintains a natural and unpretentious relationship to renewable energy—its initiatives are explained in plain detail on its website and are presented as if they are just the way things are. Instead of sensationalizing its on-site environmentally-friendly energy generation, Growing Power gives tools to the public to do their own climate protection and thus democratizes the issue of clean and sustainable energy.

C. Profit → Equality

Many advocates of food non-profits, including Vandana Shiva, believe that historically profit and capitalism have led to the concentration of power and wealth in the hands of a few. Although we saw in Chapter 3A that the Whole Foods Corporation attempts to achieve decentralized leadership with a democratic and empowered base of team members, there are limitations to its ability to achieve true equality because of its reliance on a particular demographic for field labor and its geographic discrimination across class lines. Growing Power, in comparison, exists for the same community members it relies on for its work. With a staff of about three dozen full-time workers and

²⁷¹ George DeVault, Mother Earth News: The Original Guide to Living Wisely, 1 Feb. 2003, <<http://www.motherearthnews.com>>.

²⁷² Jerry Kaufman, "Letter to Friends," Growing Power, 5 Nov. 2008, <<http://www.growingpower.org>>.

²⁷³ Herzog.

2,000 residents pitching in as volunteers, the Milwaukee farm is able to run itself sustainably while investing in the human environment in which it is located. People donate to non-profits because they know the mission is inherently tied into why they exist and what they do. Non-profits fill voids created by the capitalist system—if people want to eat food that doesn't contribute to global warming, they will inevitably demand something that doesn't come out of the capitalist mindset.

However, running a non-profit has its downsides. For one thing, Growing Power has “struggled financially from the start,” having lost a half million dollar grant from the USDA last year and repeatedly missing tax payments to the state. Because it is a non-profit, simply meeting demand does not necessarily provide enough revenue to ensure feasibility. While a corporation borrows from shareholders that are provided to it in an organized stock market, non-profits have to seek their own sources of funding by writing grant proposals to the government, philanthropic groups, and regular citizens.²⁷⁴ Renewing these grants is difficult in times of economic downturns.

One way Growing Power has attempted to address this challenge has been by establishing the Farm City Rainbow Farmers Cooperative, which markets produce for about 300 farmers all over the Milwaukee and Chicago areas. The farmers come from “a wide range of ethnicities,” including African American, Hmong, Latino, Amish and Mennonite. Growing Power runs a Market Basket program (a type of CSA—“Community Supported Agriculture”) that provides about 100 low-income families with a weekly box of fresh vegetables and fruits grown by the Youth Corps and farmers from the Rainbow Farmers Cooperative.²⁷⁵

The co-op has broadened Growing Power's supply and simultaneously improved market access for farms in the Midwest region. In addition to retail sales at the Milwaukee headquarters, Growing Power also sells to food co-ops, other retail stores and

²⁷⁴ Herzog.

²⁷⁵ "Award Recipients: Will Allen."

about 30 restaurants in the Milwaukee and Chicago areas.²⁷⁶ Last year, it reported revenue of \$1.7 million from government grants, produce sales and fees for sharing expertise and hopes to continue its growth because of increasing support for food justice and localized agriculture in the U.S., as demonstrated by Allen's recent MacArthur Genius Award.

Much like Whole Foods' demonstrated commitment to supporting microfinance through the Grameen Bank and other partnerships with philanthropists like Muhammad Yunus, Growing Power aims to ameliorate global poverty and food insecurity. Internationally, Growing Power assists community groups by sharing its knowledge of establishing healthy and sustainable food systems. With programs in Kenya, Macedonia, and Ukraine, Growing Power shares techniques and knowledge and asks for nothing in return except recognition of common humanity.²⁷⁷

IV. Differences between WF and GP

While Whole Foods has a broad scope such that its influence on the market could lead to significant reductions in fossil fuel use and greenhouse gas emissions and be (in the long run) a larger driver of change, Growing Power engenders concentrated benefits of integrity, social justice, community decision-making and constituent-driven production and consumption. It also serves as an ideal model for the nation at large, and retains values that may have been pushed out as Whole Foods grew beyond its own original community. Though Mackey knew the culture and needs of his Austin neighborhood back in 1980, his relative ignorance of each new community that Whole Foods moves into and each environmental space and actor it draws from (farmland, labor, etc.) have led him out of the ethical role he once filled. Will Allen has moved into this space in his own community—seeing a need and an injustice, and striving to fix it. Though both men are genuinely committed to environmental sustainability, their current approaches are vastly different. One relies on the free market to push renewable energy and healthy food

²⁷⁶ Miner.

²⁷⁷ Growing Power, 28 Apr. 2009 <<http://www.growingpower.org>>.

into the mainstream, while the other harnesses it with his own hands and delivers it straight into the heart of urban cities.

Since Growing Power and other CSA farms provide food directly from the farm to the community, there is no middle-man. Cutting out the middle-man, in the context of global warming, means significantly eliminating transportation emissions and the need for packaging, processing, and refrigeration. Additionally, the Growing Power site is restorative for the environment because it takes abandoned urban lots and turns them into productive and healthy gardens. In contrast, each time Whole Foods opens a new store it requires a brand new building and, whether or not the building materials are recycled, new buildings always have social and environmental consequences.

Under the criteria of carbon-neutrality, Growing Power appears the easy winner over Whole Foods. Its energy comes from compost, solar, etc. –all on site such that it powers its own operations. While Whole Foods aims to convince others to practice sound farming with minimal pollution through purchasing agreements and market influence, the non-profit undertakes these goals directly on-site. Growing Power guarantees its supporters that all food will be grown by small and local family farmers without reliance on petrochemicals. Growing Power skirts the controversy surrounding the meaning of “organic” because it doesn’t bother to certify its produce as organic through the USDA. Allen explains that it’s not a priority of theirs to be certified; that they would rather be in the fields growing food than “filling out lots of paper work for the government.”²⁷⁸ Instead, Growing Power chooses to grow “beyond organic standards,” in that it does not use synthetic chemicals, fertilizers, pesticides, or herbicides, on any crops. Its volunteers hand pick weeds, control pests with ladybugs, etc. use compost tea to control pest and bacteria problems. As a last resort, they use natural organic pesticides.

While Whole Foods seeks to “create transparency from farm to fork, with respect to production, planning, sourcing, & ingredients,” and work with “supplier partners in eliminating all unnecessary production and distribution costs to help ensure the best

²⁷⁸ Growing Power, 28 Apr. 2009 <<http://www.growingpower.org>>.

possible price,”²⁷⁹ Growing Power demonstrates easy ways to replicate growing methods and produces food directly within its own greenhouses in both rural and urban settings. It also distributes its food and augments its offerings with produce from small family farms in the Rainbow Farmers Cooperative.²⁸⁰ These practices lead to remarkable transparency and visibility for the organization. Whole Foods may put informational labels and names on its products, but Growing Power allows its supporters to walk over and see them and help out.

In comparing Whole Foods to Growing Power, it becomes clear that despite the former’s robust PR department, the latter is actually much more community oriented. Whole Foods, because it is profit based, has a customer base that is not as inclusive as that of Growing Power. In terms of social justice, Growing Power and its peer organizations can provide a necessary service to those who otherwise could not afford it. While corporations can have an ethical mission, they by definition cannot convince shareholders to invest in a project that will not bring in a profit. This explains why there is such a serious nutrition problem in low-income neighborhood and cities—most grocery stores won’t go near them for fear of losing money.

Not only does Growing Power’s model of urban agriculture match Whole Foods’ commitment to reducing food miles, but it also addresses food security, youth economic development, and reestablishment of ecosystem healthy and biodiversity.²⁸¹ Growing Power does not just aim to eliminate negative social and environmental effects. It is succeeding in *restoring* the environment and urban communities. Additionally, unlike Whole Foods, Growing Power engages in discussions of food policy reform at the national level.

²⁷⁹ "Fast Facts," Whole Foods Market Pressroom, 2009, Whole Foods Market, <<http://media.wholefoodsmarket.com/pr/wf/fast-facts.aspx>>.

²⁸⁰ Growing Power.

²⁸¹ Ibid.

V. Conclusion

“Business is only one key to addressing climate change. Businesses are nimble, motivated (by profit), and powerful enough to drive large-scale change... But even businesses are not going to drive enough change, at least not voluntarily. We can’t count on them to ride up on a white horse because, at best, most corporations will hit maybe the top thirty percentage points of efficiency, at a relatively good profit, declare success (and it will in fact have been a significant success), and then get on with making money. And that’s assuming every corporation cares about climate change, which not all of them do.”²⁸²

The Non-profit model offers a more radical reaction to environmental and social crises than does the incentive-based corporate approach. We as environmentalists can feel torn and hindered from bringing about the kind of change we’d like to see, because in a capitalist market economy it is difficult to impose limits on trade and production. By demonstrating alternatives, we create a new reality that achieves, on a small scale, the values and balance we’d like to see in the world at large. We have now examined two different expressions of environmental concern: one revolutionary within the capitalist system and one that manages to be radical outside the boundaries of the current American economic arrangement. While Whole Foods is essentially consumerism with a conscience, Growing Power represents alternative consumerism that calls for real changes in what people expect from food providers.

Environmental non-profits are neither inherently more ethical nor effective than green corporations. They do, however, offer several things that the corporation does not. For one, they provide jobs and services without answering to shareholders and are usually more trusted by the public to adhere to environmental and other ethical values, since that is what they are created to do. In the case of Growing Power, the realized benefits of running a non-profit organization include diversity of stakeholders, integrity in all operations, increased knowledge of food-sheds, self-sufficiency, improved community, environmental vitality, increased awareness of food justice throughout the country, and perhaps most importantly—education about human relationships to nature and food for

²⁸² Schendler.

those who need it most. Growing Power is modeling the ideal for our society, setting the bar high, and demonstrating feasibility.

Non-profit services are necessary for ameliorating social and environmental inequalities because they can operate in politically and economically disenfranchised areas without having to show proof of growing investment returns to their supporters. While it's fine for a company to offer healthy food at a higher price, corporate representatives should be careful not to misrepresent themselves as entities that care more about community and the environment than profit. Though some certainly seem to be taking advantage of the mutually beneficial changes that natural capitalism can offer, green businesses cannot be counted on to accept food stamps, allow people to put their purchases on a tab, or remain loyal to local growers through thick and thin. We need non-profits to do that work.

What Growing Power does is not easy to do. You need land, volunteers, patience, support, education, time, and leadership. You have to be willing to deal with weather, pests, dirt, and worms. But if your intention, like theirs, is to provide healthy and affordable food for all, there is no better way than a non-profit approach.

END OF CHAPTER 4.

FIGURES

Figure 1

Growing Power's Four Essential Areas²⁸³

Projects and Growing Methods - Growing Power demonstrates our easy to replicate growing methods through on-site workshops and hands-on demonstrations. We have farms in Milwaukee and Merton, Wisconsin, and in Chicago, Illinois. Growing Power has also established satellite-training sites in Arkansas, Georgia, Kentucky, Massachusetts, and Mississippi.

Education and Technical Assistance - Growing Power's educates folks through local, national, and international outreach for farmers and communities. We also run multiple youth programs, have an active volunteer base, and actively work on policy initiatives regarding agriculture.

Food Production and Distribution - Food production occurs in the organization's demonstration greenhouses, rural farm site in Merton, and urban farms in Milwaukee and Chicago. We also distribute produce, grass-based meats, and value-added products through the activities of over 300 small family farmers in the *Rainbow Farmers Cooperative*, and the organization's year-round food security program the *Farm-to-City Market Basket Program*.

Food Policy - Growing Power is actively trying to change how our food system is structured through critical policy changes. We are active members of the Growing Food and Justice for All initiative, the Chicago Food Policy Advisory Counsel, and the Illinois Local and Organic Food and Farm's Taskforce.

²⁸³ Growing Power, 28 Apr. 2009 <<http://www.growingpower.org>>.

Figure 2
Comparison Table

| Criteria | Green Corporation (Whole Foods) | Environmental Nonprofit (Growing Power) |
|----------------------------|--|---|
| Ideals | <ul style="list-style-type: none"> • Profit • Natural Capitalism • Corporate Social Responsibility • Fulfilling desires • Teamwork | <ul style="list-style-type: none"> • Equality • Access • Community Revitalization • Fulfilling needs • Teamwork |
| Strategies | <ul style="list-style-type: none"> • Marketing and promotions • Efficiency measures • Green technology • Economies of Scale • Consumer education and awareness • Offsetting | <ul style="list-style-type: none"> • Hard physical work • Engaging and mobilizing youth • Education • Hands-on learning • On-site energy generation • CSA |
| Effectiveness | <ul style="list-style-type: none"> • Far-reaching • Influences food suppliers to consider organic • Saves money and energy | <ul style="list-style-type: none"> • Provides access to healthy food • Generates its own renewable energy • Models an alternative way of providing food |
| Equity | <ul style="list-style-type: none"> • Uses philanthropy as a means of wealth redistribution • Profit motive prevents addressing race, class, and gender. • Does not serve those who cannot afford its products | <ul style="list-style-type: none"> • Treats food as a universal human right • Work force benefits from the fruits of its labor • CEO works alongside everyone else |
| Obstacles, Failures | <ul style="list-style-type: none"> • Does not make real changes in the consumption and growth mentality | <ul style="list-style-type: none"> • May not be sustainable if it loses grant money |

Chapter 5: Conclusion
Getting Back to Green Business
Can the Market Save the Environment?

“Authentic democracy, like plants, grows from the ground up. It is fertilized by people’s participation.” - Vandana Shiva

Overall, it seems that the question I ask in this thesis is an evolving one, or perhaps is rhetorical in nature because of the multiple realities of ethics, science, and society. The majority of the ethical frameworks I have used to analyze both Whole Foods and Growing Power are either inconclusive or contradictory with other aspects of each organization’s performance. It would be impossible to place monolithic value judgments on either entity, because of the true environmental ethic inherent in each despite its shortcomings. It would also be unfair to let any one critique of Whole Foods undermine the good work that it has done for the food industry. Even the REC purchase remains ambiguous because of the good intentions behind it and the associated increase in American wind investment in the past several years. Despite public misgivings about carbon offsetting, it certainly cannot be entirely terrible to experiment with market mechanisms that do good in preparation for nationwide regulations. The ups and downs of every market strategy are emphasized in alternating patterns of environmental discourse, making any finite conclusion difficult to come by.

It is possible, however, to examine what each institution can or cannot accomplish within its respective restraints. Identifying distinct strategies and management styles is useful in determining where different types of environmental responsibility can be taken care of as part of a larger cooperative commitment to fighting climate change, pollution, and resource depletion.

Corporation

According to Auden Schendler, “Though Wal-Mart and other corporations leading the movement on the environment and climate spend tons of money on greening measures, the truth of the matter is sometimes they still don’t manage to reduce

emissions.”²⁸⁴ What we are then left with is a waste of money and “only a slight offset of what would’ve been an even worse situation.” Though in some situations it’s the thought that counts, it certainly is disappointing to hear that Wal-Mart spends “\$500 million annually on green programs to the result of an 8.6% climb in emissions from 2005 to 2006.”²⁸⁵ Carbon offsetting and green business present similar problems, because the few successful projects cannot shake off the unrelenting critiques of greenwashing, redirected environmental responsibility, and failed additionality.

But corporations can, and must, make reforms. Whether or not they care about the environment, the price of oil eventually will go up such that any wasteful practices will become unaffordable—if they haven’t already. Corporations also possess the capital and innovative creativity to change quickly. As articulated by Auden Schendler, “Businesses are nimble, motivated (by profit), and powerful enough to drive large-scale change.”²⁸⁶ Though there are problems with capitalist and green business approaches to climate change, we need them on our side.

As far as corporations go, Whole Foods is about as good as you’ll get. What Whole Foods does well is what a green business should do—everything within its means to find creative alternatives to waste, inefficiency, artificial/chemical inputs, and pollution. It even goes beyond what most large chains would conceive of by allowing for diversity in each store location’s approach to community and environmental values—perhaps recognizing that uniformity, like monoculture, is limiting and harmful. Additionally, its REC purchase has had surprising effects on the environmental awareness of company team-members and executives. Besides helping to fuel new wind-power for the national energy grid, the Whole Foods REC deal managed to escape the “out of sight out of mind” mentality frequently generated by carbon offsetting. Whole Foods continues to work on reducing its internal emissions and has maintained open dialogue with the public through live-blogs and customer-awareness campaigns.

²⁸⁴ Auden Schendler, Getting Green Done: Hard Truths from the Front Lines of the Sustainability Revolution (New York, NY: Public Affairs, 2009).

²⁸⁵ Auden Schendler, Getting Green Done: Hard Truths from the Front Lines of the Sustainability Revolution (New York, NY: Public Affairs, 2009).

²⁸⁶ *Ibid.*

Even so, Whole Foods is an example of what James Speth calls environmentalism working from within the system. Speth claims today's environmentalism tends to be "pragmatic and incrementalist — it deals with effects rather than underlying causes... environmentalism accepts compromises as part of the process. It takes what it can get."²⁸⁷ This attitude was demonstrated by Besancon's insistence that "you have to do something," even if it isn't perfect. Whole Foods is certainly a pioneer within our capitalist societal context, bringing healthier and more socially conscious food on a mass scale into the marketplace, but it could very well be doing more damage than benefit by appeasing those with a will for change by another, more green, iteration of consumerist mindset and lifestyle. In requiring people to "buy green" to "be green" our environmental culture ignores and marginalizes the whole other realm of opportunities for environmental activism and responsibility. While people may feel better about buying from Whole Foods, they are still buying from large farms, exercising their power through their money, and perpetuating a system where we don't know our food and wouldn't have the slightest clue how to survive without the modern grocery store. Perhaps this isn't necessarily a bad thing, but with the rapid nature of changing climate, it is entirely possible that ethical business won't matter anyway—the science may actually outrun our efforts to transition to a low-carbon economy.

Relying on outstanding businesses to make voluntary and symbolic moves to put renewable energy into the grid is not enough. It is certainly significant that wind made up 42% of the new power in the U.S. last year, perhaps resulting in part from the voluntary REC market. But climate change and other global environmental crises are outcomes of ways of life and societal attitudes about growth and consumption—they cannot be turned back by symbolic purchases. Even if the voluntary carbon offset market works to help people and businesses acclimate to carbon pricing (though it works slowly—taking down one coal-fired power plant at a time), I don't believe that mandatory carbon markets will accomplish much overall regardless of how well prepared we are. Besides dumping the first world's problem on the third world, they will probably be avoided and dodged at all

²⁸⁷ James Speth, "Environmental Failure: A Case for a New Green Politics," *Yale Environment 360* (3 Nov. 2008): , *Environment 360*, Yale School of Forestry & Environmental Studies, <<http://e360.yale.edu/content/feature.msp?id=2075#comments>>.

costs—just like environmental regulations are by corporations today. Environmental remediation without equality misses what is at the soul of resistance movements. In the end, it is more likely that the voluntary carbon market will turn out to have served the interest of corporations while ignoring the voices and strategies of the people.

The market has allowed us some great things, not least of which include easy access to organic food. But I agree with Auden Schendler when he says that,

Business is only one key to addressing climate change. At best, most corporations will hit maybe the top thirty percentage points of efficiency, at a relatively good profit, declare success (and it *will* in fact have been a significant success), and then get on with making money. And that's assuming every corporation *cares* about climate change, which not all of them do.²⁸⁸

It will not matter which companies reform for which reasons—it is simply a certainty of 21st century market processes that they will. But business reforms are not enough to quell the threat of climate change—for either the human spirit or for environmental salvation. We will need education. We will need government, non-profit, and personal contributions in order to augment actions taken on the part of businesses and to channel our basic desires for a connection with the earth, equality, and sustainability for future generations.

Nonprofit

Nonprofits give us models to learn from—grassroots strategies, community based programs, consciousness of social justice, inclusiveness, and moral responsibility, and a built-in resistance to cop-outs. Though they probably cannot make the type of far-reaching changes that corporations can, nonprofits are able to pioneer and demonstrate new methods of meeting people's needs. Simultaneously, they will provide important services to those in their communities and constituencies. Just as working for a green corporation will be challenging and fun (like a puzzle—how to achieve cost-savings and do good), working for nonprofits will be exciting and spiritually gratifying.

²⁸⁸ Auden Schendler, [Getting Green Done: Hard Truths from the Front Lines of the Sustainability Revolution](#) (New York, NY: Public Affairs, 2009).

Growing Power and others like it directly engage the communities they are located within to find immediate solutions to the very environmental problems falling upon them, which are unfortunately exacerbated by the globalized system of production upon which Whole Foods relies. Whole Foods might *tell* us how its food is produced, but it will inevitably spin it in a marketing strategy rather than give us a literal picture. One can never know if Whole Foods is telling a reality, or if it's just trying to get us to spend a few bucks. Whole Foods, though its initiatives are to be lauded in the corporate world, cannot and does not attempt to provide food directly from the environmental space it occupies. Because of its non-profit motivations and deep-seated community ethic, Growing Power has been able to do just that. There is a lot to learn from the achievements of Growing Power and those like it. Though profit was the holy grail of the 20th century, perhaps simplicity and community are those of the 21st.

Looking Forward

I will continue to shop at Whole Foods. I like its food, find its stores convenient and enjoyable to be in, and have a deep respect for the courage of people like my Uncle Lee and Michael Besancon in maintaining ethics while contributing to a business that can sustain itself within the context of our American capitalist system. Certainly the next time that I walk into a Whole Foods, I will probably have a sense of imperfection in the back of my mind—each time I see a flash of greenwashing or mention of “caring for local communities.” But I will remember that Whole Foods is not perfect, and does not aim to be. Neither do I. For example, despite knowing the environmental effects of eating meat, I still do it and feel that I am a good person and a good environmentalist. We all have ways to improve on our environmental integrity, and an environmental and social consciousness and an openness to learning from new models are, to me, the most important prerequisites. Most importantly, I aim to be learn from people like John Mackey and Will Allen, like Paul Hawken and Vandana Shiva, who speak up, devote their lives to their ideals, and convince others through their action that there can be a better way.

Last Words:

“The methods and style of today’s environmentalism are not wrongheaded, just far, far too restricted as an overall approach.”²⁸⁹ – James Speth

The way we as a society approach pressing environmental problems is in many ways reflective of Western attitudes and philosophy. We believe that to solve a problem, we must go “outside” and control the external conditions that are allowing negative outcomes to be generated. If something goes wrong in society, we look outside ourselves for something or someone to blame—immediately questioning what is wrong with the market, with the political and social systems we have in place. While to a large extent systemic reforms are necessary and effective, we may also be missing something as a result of our rootedness in a Western mindset. After all, it was rational, atomistic, outward-looking worldviews that led us to offset markets—which at their core are “outward-looking” solutions.

Asian philosophies offer a different mode of approaching problems, one that involves turning inward. In Buddhism, one is encouraged to adapt to the realities of the universe and let go of material attachments and ideas about ourselves. The questions to ask here are not “what tools do I have, what should I do first,” but rather “what role do I play in this problem? What attachments am I holding on to?” This is a process that entails inner-work, mastering one’s own mind and desires. In the case of environmental challenges, particularly climate change, we may be losing out by not asking the question “Why do I desire these goods and this lifestyle? What truth am I missing about existence and the finite nature of all things?” In the case of Whole Foods, the corporation does better for its own goals when it looks inward and changes that which it can change, ridding itself of material attachments—though ultimately it cannot because its premise is material in nature. Growing Power is more fluid, working from within and addressing the truth that food is necessary but temporary, passing through us and again returning to the Earth. Each individual action, and each practice of environmental stewardship and human liberation move us closer to finding truth about our relationship to the earth. A true

²⁸⁹ James Speth, "Environmental Failure: A Case for a New Green Politics," *Yale Environment 360* (3 Nov. 2008): , *Environment 360*, Yale School of Forestry & Environmental Studies, <<http://e360.yale.edu/content/feature.msp?id=2075#comments>>.

sustainability, in theory and practice, will require a deeper acknowledgement and acceptance of our transient nature on this planet, and the transient nature of all things we at some point perceive ourselves as reliant upon.

We can learn from other mindsets. Let's turn inward.

END.

Bibliography

- "About the Rodale Institute: History | Rodale Institute." Rodale Institute, Leaders in Organic Solutions for Global Warming, Famine Prevention, and Nutrition since 1947 | Rodale Institute. 22 Mar. 2009 <<http://www.rodaleinstitute.org/history>>.
- Adams, Richard M., Brian H. Hurd, and John Reilly. A Review of Impacts to U.S. Agricultural Resources. Feb. 1999. The Pew Center on Global Climate Change.
- Arlidge, John. "Peace, Love, and Profit- Meet the World's Richest Organic Grocer." The Observer 29 Jan. 2006.
<<http://observer.guardian.co.uk/foodmonthly/story/0,,1694454,00.html>>.
- "Award Recipients: Will Allen." Leadership for a Changing World ([leadershipforchange.org](http://www.leadershipforchange.org)).
<<http://www.leadershipforchange.org/awardees/awardee.php3?ID=303>>.
- Bayon, Ricardo, Amanda Hawn, and Katherine Hamilton. "How Does the Voluntary Carbon Market Relate to the US REC Market?" Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series). Minneapolis: Earthscan Publications Ltd., 2007.
- Bayon, Ricardo, Amanda Hawn, and Katherine Hamilton. Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series). Minneapolis: Earthscan Publications Ltd., 2007.
- Besancon, Michael. "Interview with Senior Global Vice President of Purchasing, Distribution and Marketing for the Whole Foods." Telephone interview. 10 Mar. 2009.
- Boleman, Patrick. "Michael Pollan and other food authors and activists offer their elevator pitches for Obama." Grist (10 Nov. 2008). Grist: A Beacon in the Smog. Grist. <<http://www.grist.org/article/going-up-part-4>>.
- Brady, Paige. "Powered by Recycled Cooking Oil." Weblog post. Whole Story: The Official Whole Foods Market Blog. 2 Dec. 2008.
<<http://blog.wholefoodsmarket.com/category/green-action/page/3/>>.
- Bridges, Janet. "Green Marketing: Promotion and Publicity Tips for Green Businesses." Clean, Green and Read All Over: Ten Rules for Effective Corporate Environmental and Sustainability Reporting. Ed. J. Emil Morhardt. Milwaukee, WI: ASQ Quality P, 2002.
- Burtis, Bill, and Iain Watt. "Getting to Zero: Defining Corporate Carbon Neutrality." Clean Air-Cool Planet. 2008. Clean Air- Cool Planet and Forum for the Future.
<<http://www.cleanair-coolplanet.org/documents/zero.pdf>>.
- Carbon Offsetting Trends Survey. 2008. Ecoscurities and Climate Biz.
<http://www.ecoscurities.com/Standalone/Carbon_Offsetting_Trends_Survey_2008/default.aspx>.
- Chan, Iris L., Roni A. Neff, and Katherine C. Smith. "Yesterday's dinner, tomorrow's weather, today's news? US newspaper coverage of food system contributions to climate change." Center for a Livable Future, Johns Hopkins Bloomberg School of Public Health (2008).

"Chicago Farms." Growing Power. <<http://www.growingpower.org>>.
Commercial Fertilizers. Rep. AAPFCO University of Kentucky, 2002.

"Community Giving | WholeFoodsMarket.com." Whole Foods Market: Natural and Organic Grocery. 28 Apr. 2009
 <<http://www.wholefoodsmarket.com/values/giving.php>>.

"Community Supported Agriculture." Local Harvest. 2009. <www.localharvest.org>.

"Complete Eligibility Criteria - Innovation Exchange - Environmental Defense Fund." Environmental Defense Fund - Finding the Ways That Work. Environmental Defense Fund. <<http://www.edf.org/page.cfm?tagID=24880>>.

David Suzuki Foundation: Home. 28 Apr. 2009
 <http://www.davidsuzuki.org/Climate_Change/What_You_Can_Do/carbon_offsets.asp>.

DeVault, George. Mother Earth News: The Original Guide to Living Wisely. 1 Feb. 2003. <<http://www.motherearthnews.com>>.

"Documents Describe Whole Foods Strategy." The New York Times Online 15 Aug. 2007. 14 Mar. 2009
 <<http://www.nytimes.com/2007/08/15/business/15food.html?ex=1344830400&en=065f213bfb61f1b&ei=5088&partner=rssnyt&emc=rss>.
<http://www2.wholefoodsmarket.com/blogs/jmackey/2006/11/09/conscious-capitalism-creating-a-new-paradigm-for-business/>>.

Fahrenthold, David A. "There's a Gold Mine in Environmental Guilt." The Washington Post 6 Oct. 2008. Ecosecurities.
 <http://www.ecosecurities.com/Home/Reducing_corporate_emissions/Carbon_offsetting/default.aspx>.

"Fast Facts." Whole Foods Market Pressroom. 2009. Whole Foods Market.
 <<http://media.wholefoodsmarket.com/pr/wf/fast-facts.aspx>>.

Fisher, Brenna. "From the Corner Office- John Mackey." Success Magazine Online.
 <<http://www.successmagazine.com/From-the-Corner-Office-John-Mackey/PARAMS/article/560/channel/19>>.

Frank, Thomas. "Liberation Marketing and the Culture Trust."

Fromartz, Samuel. Organic, Inc: Natural Foods and How They Grew. Orlando, FL: Harcourt, Inc., 2006.

Garry, Michael. "Retailers Cutting Energy Use in Stores." Supermarket News Online 3 Mar. 2009. <<http://supermarketnews.com/technology/retailers-energy-0323/>>.

"Getting to Zero: Defining Corporate Carbon Neutrality." Clean Air-Cool Planet. 2008. Forum for the Future. <<http://www.cleanair-coolplanet.org/documents/zero.pdf>>.

GreenBiz Staff. "Food Industry Puts Green Initiatives on the Menu." Daily News on Green Business, Business and Climate Change and Sustainable Business Practices. 13 Aug. 2008. GreenBiz. <www.greenbiz.com>.

"Greenwash Factsheet." Corpwatch: Holding Corporations Accountable. 22 Mar. 2001. Corpwatch. <www.corpwatch.org>.

Growing Power. 28 Apr. 2009 <<http://www.growingpower.org>>.

Hallberg, Milton C. Economic Trends in U.S. Agriculture and Food Systems Since World War II. Ames, IW: Iowa State UP, 2001.

- Harkinson, Josh. "Are Starbucks and Whole Foods Union Busters?" Mother Jones Online 6 Apr. 2009. <<http://www.motherjones.com/politics/2009/04/are-starbucks-and-whole-foods-union-busting>>.
- Hawken, Paul, Amory Lovins, and L. H. Lovins. Natural Capitalism. New York, NY: Little, Brown, and Company, 1999.
- Hawken, Paul. The Ecology of Commerce. New York, NY: Harper Collins, 1993.
- Henneke, Ben. "A Policy Perspective on the Voluntary Carbon Market: Seeding a Real Market for Emissions Reductions." Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series). By Ricardo Bayon, Amanda Hawn, and Katherine Hamilton. Minneapolis: Earthscan Publications Ltd., 2007.
- Herzog, Karen. "A will and a way for Allen." Journal Sentinel [Milwaukee, WI] 6 Oct. 2008. Journal Sentinel Online. <<http://www.jsonline.com/news/milwaukee/32467114.html>>.
- Horovitz, Bruce. "Whole Foods Goes with the Wind." USA Today: Online 9 Jan. 2006. <http://www.usatoday.com/money/industries/food/2006-01-09-whole-foods-usat_x.htm>.
- Inge, Christina. "Growing a Green Business Without Compromise | GreenBiz.com." GreenBiz.com - Daily News on Green Business, Business and Climate Change and Sustainable Business Practices. 8 Sept. 2008. <<http://www.greenbiz.com/feature/2008/09/08/growing-green-business-without-compromise>>.
- "Introduction to StopGreenwash.org." Greenpeace | Greenwashing. <<http://stopgreenwash.org/introduction>>.
- Is capitalism sustainable? political economy and the politics of ecology. New York: Guilford P, 1994.
- Kaufman, Jerry. "Letter to Friends." Growing Power. 5 Nov. 2008. <<http://www.growingpower.org>>.
- Koehn, Nancy F., and Katherine Miller. "John Mackey and Whole Foods Market." Harvard Business School (2007).
- Leopold, Aldo. A Sand County Almanac. Oxford, UK: Oxford UP, 1949.
- Loftus, Kathy. "From Trash to Treasure." Weblog post. Whole Story: The Official Whole Foods Market Blog. 13 Jan. 2009.
- Loftus, Kathy. "Re: Rec Purchase." E-mail to the author. 14 Oct. 2008.
- Loftus, Kathy. "Re: Share Your Ideas: Keep Earth Day Going." Weblog comment. 24 Apr. 2009. <<http://www.wholefoodsmarket.com/live/>>.
- Mackey, John. "Conscious Capitalism: Creating a New Paradigm for Business." Weblog post. The CEO's Blog. 9 Nov. 2006. 14 Mar. 2009 <<http://www2.wholefoodsmarket.com/blogs/jmackey/2006/11/09/conscious-capitalism-creating-a-new-paradigm-for-business/>>.
- Media Publications. "How Chevron Makes the Most of the Energy We Have." Press release. Will You Join Us. Apr. 2009. Chevron Corporation. <http://willyoujoinus.com/assets/downloads/media/Chevron_Becoming%20More%20Efficient_Transcript.pdf>.

- Miner, Barbara. "An Urban Farmer is Rewarded for His Dream." New York Times Online 25 Sept. 2008. <<http://www.nytimes.com/2008/10/01/dining/01genius.html>>.
- "Motorola Renew is Worlds First Carbon Neutral Mobile Phone : CleanTechnica." CleanTechnica - Technology Inspired By Nature. 7 Jan. 2008. <<http://cleantechnica.com/2009/01/07/motorola-renew-is-worlds-first-carbon-neutral-mobile-phone/>>.
- "OCA's Resource Center on Fair Trade and Social Justice." Organic Consumers Association. <<http://www.organicconsumers.org/fairtrade.cfm>>.
- O'Connor, Martin, ed. Is capitalism sustainable? political economy and the politics of ecology. New York: Guilford P, 1994.
- "Oilwatch Position on Voluntary Carbon Market." Carbon trade watch. 9 Sept. 2008. <http://www.carbontradewatch.org/index.php?option=com_content&task=view&id=206&Itemid=36>.
- "Our Core Values | WholeFoodsMarket.com." Whole Foods Market: Natural and Organic Grocery. <<http://www.wholefoodsmarket.com/values/corevalues.php>>.
- "Our History | WholeFoodsMarket.com." Whole Foods Market: Natural and Organic Grocery. 28 Nov. 2008 <<http://www.wholefoodsmarket.com/company/history.php>>.
- "Partner Profile | Green Power Partnership| US EPA." U.S. Environmental Protection Agency. <<http://www.epa.gov/greenpower/partners/partners/wholefoodsmarket.htm>>.
- Peace, Janet. "An economist's perspective on the voluntary carbon market: Useful but not sufficient." Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series). By Ricardo Bayon, Amanda Hawn, and Katherine Hamilton. Minneapolis: Earthscan Publications Ltd., 2007.
- Pegg, J. R. "Climate Change Increases Food Security Concerns." Environment News Service. 5 Dec. 2006. <www.ens-newswire.com>.
- Pfeiffer, Dale A. Eating Fossil Fuels: Oil, Food, and the Coming Crisis in Agriculture. Gabriola Island, BC: New Society, 2006.
- Pollan, Michael. "Farmer in Chief." New York Times Magazine 9 Oct. 2008.
- Pollan, Michael. "My Letter to Whole Foods." Letter to John Mackey. 12 June 2006.
- Pollan, Michael. "My Second Letter to Whole Foods."Michael Pollan..... 15 Sept. 2006. <<http://www.michaelpollan.com/article.php?id=83>>.
- Pollan, Michael. "The Way We Live Now: Produce Politics." The New York Times Magazine 14 Jan. 2001. <<http://www.michaelpollan.com/article.php?id=70>>.
- Roth, Cathy. "Community Supported Agriculture." Vegetable Program. 2008. UMass Amherst. <http://www.umassvegetable.org/food_farming_systems/csa/index.html>.
- "SAAN - CSA -UofMass on CSAs." Yahoo! GeoCities: Get a free web site with easy-to-use site building tools. 28 Apr. 2009 <http://www.geocities.com/rainforest/7813/c_umass.htm>.
- Schendler, Auden. Getting Green Done: Hard Truths from the Front Lines of the Sustainability Revolution. New York, NY: Public Affairs, 2009.

- Scott, Cameron. "Trader Joe's Gets it Easy." San Francisco Chronicle 26 Mar. 2009. <http://www.sfgate.com/cgi-bin/blogs/green/detail?entry_id=37558>.
- Severson, Kim. "Agribusiness Goes Organic." San Francisco Chronicle Online 13 Oct. 2002. <<http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2002/10/13/MN242010.DTL>>.
- Shiva, Vandana. Soil Not Oil: Environmental Justice in an Age of Climate Crisis. Cambridge, MA: South End P, 2008.
- Skidmore, Sarah. "Whole Foods, Wild Oats Integration Challenged by FTC." Huffington Post Online 12 Jan. 2009. <http://www.huffingtonpost.com/2009/01/12/whole-foods-wild-oats-int_n_157222.html>.
- Smith, Kevin. "Offset Standard is off its Target." 3 Apr. 2008.
- Smith, Kevin. "Offsetting Democracy: Exposing the inadequacies of carbon trading." Resurgence Apr. 2008. <http://www.tni.org/detail_page.phtml?&act_id=18013&menu=11c>.
- Speth, James. "Environmental Failure: A Case for a New Green Politics." Yale Environment 360 (3 Nov. 2008). Environment 360. Yale School of Forestry & Environmental Studies. <<http://e360.yale.edu/content/feature.msp?id=2075#comments>>.
- Stahler, Charles. "How Many Adults are Vegetarian?" Vegetarian Journal (2006). The Vegetarian Resource Group Vegetarian Journal. The Vegetarian Resource Group. <<http://www.vrg.org/journal/>>.
- Stern, Nicholas. "Executive Summary (Full)." Stern Review: The Economics of Climate Change Iv (2006).
- "Stop Trashing the Climate Executive Summary." Stop Trashing the Climate. June 2008. 2009 <<http://www.stoptrashingtheclimate.org/>>.
- "Survey Shows Public Corporations Upping Green Initiatives While Smaller Companies Lag." GreenBiz.com 21 Apr. 2006. <<http://www.greenbiz.com/news/2006/04/21/survey-shows-public-corporations-upping-green-initiatives-while-smaller-companies-la>>.
- Taylor, Dorceta. "The Rise of the Environmental Justice Movement: From Toxics to Green Jobs." Pomona College, Claremont, CA. 23 Apr. 2009.
- Trexler, Mark. "Renewable Energy Certificates to carbon offsets: What's the right exchange rate??" Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series). By Ricardo Bayon, Amanda Hawn, and Katherine Hamilton. Minneapolis: Earthscan Publications Ltd., 2007.
- Trexler, Mark. "Renewable Energy Certificates to carbon offsets: What's the right exchange rate?" Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series). By Ricardo Bayon, Amanda Hawn, and Katherine Hamilton. Minneapolis: Earthscan Publications Ltd., 2007.
- Trexler, Mark. "Why Do You Focus So Much on Additionality in TC + ES's Report for Clean Air-Cool Planet on Retail Offset Providers?" Interview. Weblog post. ClimateBiz. 3 Jan. 2007. <<http://www.climatebiz.com/blog/2007/01/03/why-do-you-focus-so-much-additionality-tces?s-report-clean-air-cool-planet-retail-offset-providers>>.

- "2008: Another Record Year for Wind Energy Installation." American Wind Energy Association. 20 Apr. 2009
 <http://www.awea.org/pubs/factsheets/Market_Update_4Q08.pdf>.
- UN Environment Program. Global Trends in Sustainable Energy Investment 2008: Analysis of Trends and Issues in the Financing of Renewable Energy and Energy Efficiency. 2008.
- United Nations. Food and Agriculture Organization. Climate Change and Food Security: A Framework Document. Rome, 2008.
- Vitale, Ben. "A conservationist's perspective on the voluntary carbon market: Can it help us overcome inertia?" Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series). By Ricardo Bayon, Amanda Hawn, and Katherine Hamilton. Minneapolis: Earthscan Publications Ltd., 2007.
- Wenz, Peter. "Synergistic Environmental Values." Environmental Virtue Ethics. New York, NY: Rowman & Littlefield, Inc, 2005. 197-213.
- Wheeler, Jacob. Growing Power.
 <<http://www.growingpower.org/Chicago%20Boasts.pdf>>.
- "Whole Foods, FedEx Kinko's Snap up Renewable Energy Credits." The National Environmental Education & Training Foundation 19 Jan. 2006. SRI World Group, Inc. 2 Apr. 2009
 <<http://www.socialfunds.com/news/article.cgi/1908.html>>.
- "Whole Foods Market® Announces Alternative Energy Investment, Energy Savings with New Store Designs, Existing Store Retrofits." Press release. Whole Foods Market Pressroom. 21 Apr. 2009.
 <<http://www.wholefoodsmarket.com/pressroom/2009/04/21/whole-foods-market%C2%AE-announces-alternative-energy-investment-energy-savings-with-new-store-designs-existing-store-retrofits/>>.
- "Whole Foods Market Establishes Whole Planet Foundation to Fight Poverty in Developing Countries by Empowering Those in It." Whole Foods Market Pressroom. Whole Foods Market.
 <<http://www.wholefoodsmarket.com/pressroom/2005/10/11/whole-foods-market-establishes-whole-planet-foundation-to-fight-poverty-in-developing-countries-by-empowering-those-in-it/>>.
- "Whole Foods Market Press Room." Whole Foods Market: Natural and Organic Grocery. Whole Foods Market. 15 Mar. 2009
 <<http://www.Wholefoodsmarket.com/pressroom>>.
- "Whole Foods Market Wins Environmental Protection Agency 2006 Green Power Partner of the Year Award." Whole Foods Market: Natural and Organic Grocery. 7 Dec. 2006. <<http://www.wholefoodsmarket.com/pressroom/2006/12/07/whole-foods-market-wins-environmental-protection-agency-2006-green-power-partner-of-the-year-award/>>.
- "Whole Foods Wins 2009 Green Choice Award." Progressive Grocer- Find Supermarket Industry News & Grocery Store News. 19 Apr. 2009.
 <http://www.progressivegrocer.com/progressivegrocer/content_display/features/e3ib644036b4dd16974ac62c407c1139cab>.

Winston, Andrew. "Do Quality Offsets Exist?" Weblog post. Finding the Gold in Green. 14 Oct. 2008. <<http://www.andrewwinston.com/blog/>>.

Wright, Walker. "How Does the Voluntary Carbon Market Relate to the US REC Market?" Voluntary Carbon Markets An International Business Guide to What They Are and How They Work (Environmental Markets Insight Series). By Ricardo Bayon, Amanda Hawn, and Katherine Hamilton. Minneapolis: Earthscan Publications Ltd., 2007.