

2010

# Green Consumerism, Climate Change and Environmentalism: Consuming Our Way to Renewability

Richard MacGregor  
*University of Windsor*

Follow this and additional works at: <https://scholar.uwindsor.ca/etd>

---

## Recommended Citation

MacGregor, Richard, "Green Consumerism, Climate Change and Environmentalism: Consuming Our Way to Renewability" (2010). *Electronic Theses and Dissertations*. 53.  
<https://scholar.uwindsor.ca/etd/53>

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email ([scholarship@uwindsor.ca](mailto:scholarship@uwindsor.ca)) or by telephone at 519-253-3000ext. 3208.

GREEN CONSUMERISM, CLIMATE CHANGE AND ENVIRONMENTALISM:  
CONSUMING OUR WAY TO RENEWABILITY

by  
Richard K. MacGregor

A Thesis  
Submitted to the Faculty of Graduate Studies through the Department of Sociology,  
Anthropology and Criminology  
In Partial Fulfillment of the Requirements For  
The Degree of Master's of Arts at the  
University of Windsor

Windsor, Ontario, Canada  
2010  
©2010 Richard MacGregor

Green Consumerism, Climate Change and Environmentalism: Consuming Our Way to Renewability

by

Richard K. MacGregor

APPROVED BY:



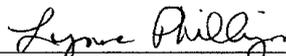
Dr. Philip Rose  
Department of Philosophy



Dr. Arny Fitzgerald  
Department of Sociology, Anthropology, & Criminology



Dr. Karen Engle, Advisor  
Department of Sociology, Anthropology, & Criminology



Dr. Lynne Phillips, Chair of Defence  
Department of Sociology, Anthropology, & Criminology

January 25, 2010

### **Author's Declaration of Originality**

I hereby certify that I am the sole author of this thesis and that no part of this thesis has been published or submitted for publication.

I certify that, to the best of my knowledge, my thesis does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that I have included copyrighted material that surpasses the bounds of fair dealing within the meaning of the Canada Copyright Act, I certify that I have obtained a written permission from the copyright owner(s) to include such material(s) in my thesis and have included copies of such copyright clearances to my appendix.

I declare that this is a true copy of my thesis, including any final revisions, as approved by my thesis committee and the Graduate Studies office, and that this thesis has not been submitted for a higher degree to any other University or Institution.

## ABSTRACT

This thesis explores green consumerism and how it is used within the current practices of corporate and governmental agenda. It also analyzes the role consumerism in Western culture has played in modifying popular environmentalism to become more compatible with free-market liberalization. Through an analysis of international environmental organizations, as well as contemporary cases of green consumerism it is argued that many environmental concerns are themselves becoming commodified due to the inherent and deep seated role consumerism has in Western culture. In conclusion, implications to long term changes to environmental management are discussed as well as the problems inherent with the use of individualized consumption as a method for instilling comprehensive changes to the way our environment is managed.

## DEDICATION

I would like to dedicate this thesis to my Mother, Father and Grandparents who have always supported my ambitions and goals. Without their support I would not have had the opportunity to pursue this endeavour.

#### ACKNOWLEDGEMENTS:

I wish to thank my entire thesis committee for sticking with my research and endorsing a thesis which I have both personal and professional interests in. I thank my advisor Dr. Karen Engle for her continued support throughout the production of this thesis as well as my undergraduate and graduate work. I thank Dr. Amy Fitzgerald for her insightful ideas which were incorporated in this research, and I also thank Dr. Phillip Rose for insuring that my claims always remain substantiated.

**TABLE OF CONTENTS:**

AUTHOR'S DECLARATION OF ORIGINALITY	iii
ABSTRACT	iv
DEDICATION	v
AKNOWLEDGEMENTS	vi
I: INTRODUCTION	1
II: CHAPTER 1	12
A Background of International Environmental and Climate Change Politics/Organizations	
II: CHAPTER 2	44
Risk, Consumer Culture and Climate Change	
III: CHAPTER 3	61
Green Energies and the Auto Industry	
IV: CHAPTER 4	83
The Future of Environmentalism in the Marketplace	
REFERENCES	93
VITA AUTORIS	99

## INTRODUCTION: GREEN CONSUMERISM AND CLIMATE CHANGE

Recent developments in environmental management policies have reflected a contemporary concern for rising global temperatures and the subsequent projected negative effects this event is likely to have. As climate change is becoming one of the predominant concerns for many environmentalists, scientists and policymakers, it has become apparent that many industries are guiding their policy frameworks towards focusing on the reduction of the production of green house gases (GHGs). The ability to mitigate climate change through the establishment of policy frameworks focused on reducing GHGs has thus become a current trend within at least some sectors of Canadian, US and European governments, as well as within some large scale corporations, manufacturing companies and businesses.

Moreover, along with these observable trends towards creating eco-friendly businesses, it is also apparent that economic and financial considerations are just as much the motive behind these changes as any quoted environmental goals might be. The climate change problem is now becoming a major environmental problem which has also resulted in large expenditures in scientific research and development, as well as many political battles. As a consequence industries strongly connected to climate change, such as the logging, energy and the automotive industries, have experienced particularly strong pressures from environmentalists, scientists, and now even politicians to begin to reduce their environmental footprints.

A particular illustration within the automotive industry of North America is General Motor's present situation where there is now a focus on directing their fleets to become more fuel efficient, and 'eco-friendly'. In partnership with the US Treasury

Board and the Canadian Government, General Motors has now begun business restructuring plans directed primarily at mitigating the environmental impacts of their products. Considered their 'reinvention plan,' GM is now publicly marketing their desire towards a more sustainable future. This reinvention of GM is now so strongly enmeshed within the overall 'climate change problem' that the focus on creating fuel efficient cars has become one of its largest marketing strategies for ensuring that it will carry a smaller ecological footprint in the future. The marketing of eco-friendly products has quickly reached a mainstream status within the automotive industry in general. In fact, GM now often boasts that they have "the most models with EPA (Environmental Protection Agency endorsed) estimated 30 mpg or higher highway fuel economy" (as found on the GM restructuring website). This is done through a combination of research and development on alternative fuel systems including: Active Fuel Management, Clean Diesel Technology, Biofuels, Hybrid engines, electrical engines and hydrogen fuel cell engines. These advancements are now among the top priorities of GM's restructuring and future goals to produce products that are more environmentally sustainable. But along with this focus, it is obvious that these transitions are designed under the premise that higher fuel efficiency will make GM's automobiles more marketable (or economically viable) in the future; there is an inherent assumption regarding what the future consumer desires in an automobile. It seems that at the basis of this restructuring plan is a presupposition that the North American consumer desires fuel efficiency and that for GM to legitimate its restructuring decisions it must place a very strong emphasis on its commitment to ensure it meets this goal. As a result GM has made it very clear through present marketing and advertising that it is a company very dedicated to reducing

emissions.

But GM is not alone in promoting these interests; one of the most basic strings attached to the US Treasury Board's (the government department which now owns approximately 60% of GM's stocks) restructuring loan includes a requirement that GM 'modernizes' its products in order to compete with other manufacturer's fleets. This modernization is viewed as a necessity in order for this company to remain economically viable. Thus not only is GM announcing its interest in mitigating GHG emissions, it is also required to 'reinvent' itself in order to gain essential funds. GM essentially must cooperate with the US Treasury Board's demand for mitigating global climate change if it wishes to receive bailout funds for its survival.

Ultimately, this new restructuring plan represents a much more general, or basic social phenomenon that I wish to explore in this thesis. There is, at the heart of this restructuring plan, an inherent belief that consumers are much more interested in purchasing automobiles with higher fuel efficiencies – or in translation: ecologically friendly vehicles – than vehicles with low mileage and high volumes of emissions. There is then, as briefly described above, an assumption that consumers are just as interested as the US Treasury Board and GM in burning less oil through their travels. Now, the reasons for why this is the case are likely to be very broad and complex, and are probably very much due to the inflating gas prices North America has been experiencing in the last decade, but it also suggests, even if only partially, a changing perspective on the environment within the US government, and possibly of the North American consumer. As I will present in more detail in the body of this thesis, most of the marketing strategies for promoting GM's commitment to reducing fossil fuel consumption focus on presenting

GM's commitment to mitigating climate change. Thus promoting environmentalist values is represented in this case as a positive value to promote to consumers. In simple terms: consumers want 'green' products.

What then is the significance of this desire for 'green'? Products which are marketed and are seemingly committed to helping the environment are now a desired commodity. But under what pretenses are these products being promoted, and under what premises are these products wanted? And more specifically, in 2009, in the age ostensibly on the dawn (or already experiencing the effects) of climate change and a global ecological disaster, how has the desire for 'green' begun to carry many other meanings and connotations? Has the desire to go green now just become another way of expressing the desire to mitigate climate change? And if so what are the social, economic, and environmental implications of such a phenomenon? I am interested in how governments, and businesses are promoting these green products to consumers, and in inquiring what the long term implications of these processes might be in regard to environmental conservation.

As I wish to argue in this thesis, climate change is not only a global environmental problem, it is also rhetoric which is used politically to promulgate governmental, and in the above mentioned case, GM's corporate policies. Thus, as popular environmentalism which is presently concerned with climate change is making its way into governmental and corporate policies, I wish to argue that this form of environmentalism is becoming commodified and politicized by the private market system, as well as the governmental institutions of North America. Whereas environmentalist interests can be articulated in a diversity of protocol such as those

expressed through deep ecologists, eco-feminists, eco Marxists, prometheans, survivalists etc. (see Dryzek, 2005) I wish to emphasize that I am mainly interested in how the actual environmental concerns of these and many other environmentalists are becoming commodified and consequently changed through the modern approaches to environmental management. Thus along with the political usage of climate change there is another more social, and ideologically driven phenomenon which has attached itself to climate change rhetoric. But beyond this argument I wish to further argue that this tendency to marketize environmentalism is not only a result of capitalist ideologies and systems taking hold of environmental values, but of a predominantly Western cultural logic that has become so entrenched within the ideals of accumulating commodities that the only manner in which environmental change can be reasonably conceptualized is through the framework of markets and consumption.

What then are the potential consequences of this phenomenon? It is this question amongst the others postulated above which drives me to research this phenomenon. As a western economy often also referred to as a 'consumer's economy' begins to embrace environmental problems (particularly climate change) how does its methodology for solving these issues work, and what are the strengths and weaknesses of this approach? The ideologically/culturally driven economic system of the west, and its implications for the environment are therefore one of my main interests in this thesis. As a culture which seems to be often considered a 'consumer culture' begins to take action on pressing environmental issues such as climate change, how do they solve these problems, and what are some of the consequences of these methods?

## CONSUMER CULTURE?

The interpretation of modern western economics as mentioned above is often conceptualized through the term 'consumer culture'. This term differs from the 'consumer's economy' in that it focuses on the more systemic and fundamental causes of the economy. Consumer culture attempts to conceptualize a culture which at its basic workings promotes mass consumption and the perpetual flow of goods through the hands of many individuals. The consumer's economy can thus be seen as a term which conceptualizes an economic system originating from this consumer culture. In other words, consumer culture is a term which focuses more on the cause of the current consumer's economy found in most of the Western world. This area of social research has a large body of literature (see for example: Bauman, 2005; Featherstone, 1991; Jameson, 1984; Jameson, 1993 ; O'Connor, 1998) and often analyzes the tendencies for modern western societies to become obsessed with the consumption of mass produced products. Consumerism is therefore a term often used to explain a social system based largely on the mass consumption of goods and products. Along with mass production, consumerism focuses on the social characteristics found mostly within capitalist nations that entail large scale, excessive, or even exploitive forms of consumption practices.

But another term which has found strong appeal in the social sciences to describe modern society is 'postmodernism.' This is also often referred to in conjunction with consumerism, as they tend to be used synonymously to describe the general culture of Western society. This has resulted in a tendency for many researchers to interpret them as contemporaries of each other. Though they are often used in similar contexts, I find that they are terms to be used for different levels of analysis. In this thesis, I will

primarily use consumerism as a term to describe a Western culture which has become based at the social and structural levels on the consumption of mass produced goods and products. As mass production, instant communications, and fast paced market systems continue to spread across the world, I wish to conceptualize Western consumerist culture as becoming quickly dismissive of traditional values, customs and beliefs, and instead more concerned with the appeals to commodities and their associated meanings. The concept of consumer culture will be used as an analytical tool in this thesis to describe how political, scientific, and economic decision-making incorporate inherent cultural elements. As all of these processes are recognized to be the actions of governments, businesses and individuals within a particular culture, I will endorse a perspective that suggests no political, scientific, or economic actions work beyond cultural constructs and forms of logic.

Michael Featherstone (1991) has written extensively on the concepts of postmodernism and consumerism, and does well with articulating postmodernism here:

The coming into prominence of the term 'postmodernism' has aroused a good deal of interest amongst academics and intellectuals. While some dismiss it as merely a transient and shallow intellectual fad, others regard it as signifying a deep-seated break not only with artistic modernism, but with the larger epoch of modernity. This entails a resultant rejection of all the cultural manifestations of modernity as passe, and here the term 'culture' would be extended to include wider cultural production not just in the arts, but also in the spheres of science, law, and morality which Weber saw as originating as part of the differentiation process of modernity. (p.51)

To Featherstone, postmodernism is a concept used by academics as a standpoint which perceives all social spheres as a form of culture. Postmodernism is a term which refrains from understanding any particular culture in a generalisable manner, and is instead a term which sees politics, arts, science and law all as expressions of particular

culture.

Fredric Jameson (1984) has also argued that postmodernism is the result of the 'cultural logic of late capitalism.' Postmodernism is to Jameson not only a term used for social theorising, but a term used to describe an actual state of affairs within Western culture. To Jameson (1993) postmodernism 'expresses the deeper logic' of the 'late consumer', or multinational capitalist social system. Postmodernism is therefore a specific period in social history which can be used to articulate how an advanced state of capitalism has shaped the individuals in society. As I will endorse this perspective, consumerism will be used to express a system of cultural logic which has emerged predominantly within Western culture.

The importance of giving some context to postmodernism in this introduction is to ensure the proper understanding of how it relates to the term 'consumerism' in the body of this thesis. As I have briefly shown, these terms are often used together, but have also been used in separate contexts. I wish to focus on using 'consumerism' to describe a Western culture working within a form of logic, as Jameson argues. --Deleted mention of postmodernism here--

The importance of these terms to this thesis are to help conceptualize how climate change and green consumerism have themselves both become social phenomena; social phenomena in that they are both in need of social actors for their impacts to be seen. Whereas climate change may also be a natural phenomenon which will occur with or without social articulation, I wish to stress that the social consequences of climate change are the main concerns of this research. Where climate change can be used as a word to articulate a natural phenomenon, I wish to use it in this thesis as a social event that is

causing extensive and acute changes in the global, but more particularly Western culture. As this problem becomes researched and verified by larger groups of scientists and experts, it also causes changes in different levels of society – and especially in the governmental and business worlds. Climate change has become a powerful and socially relevant phenomenon, and I thus wish to analyze its impacts on contemporary events in politics and business policies.

The term ‘green consumerism,’ which focuses on the consumption of goods primarily because of their appeal to environmentalist values, is a social concept which identifies a social phenomenon I find to be quite contemporary and relevant to my research. As more and more products are marketed under environmentalist rhetoric, and as the ‘greening’ of the market system becomes a lucrative area it is vital to study the causes, methods and implications of this process. ‘Green consumerism,’ will therefore be used in the context of climate change and carbon reduction policies in this thesis, and will be used to express the tendency for a consumer culture’s habit of developing solutions to environmental problems through consumption practices. Thus my interest in analyzing this event is to highlight how reliant environmental ‘problems’ are on social and political elements for their actual influences on society, and ultimately to investigate what some of the social, political and environmental implications are of a society which marketizes and consumes its way towards solving a globally significant problem. The main questions to be advanced are therefore: how has and is climate change affecting government and business policies, how are these institutions reacting to and solving the claimed problems of climate change, and finally, what are the short and long term implications of these changes in regard to collective environmentalism.

## THE STRUCTURE OF THE THESIS

As I have introduced above, the restructuring strategies developed by GM and the US Treasury Board, as well as between GM and the Canadian and Ontarian governments, will be used as an example to illustrate my argument that environmentalist ideals are becoming commodified and used as political rhetoric to promulgate policies. Prior to this examination I will present the background of the many political organizations and policies which have within the last several decades emerged due to mounting concerns over climate change – in order to illustrate the gradually increasing presence of environmentalist cultures and ideals influencing politics. These include but are not limited to: the Kyoto Protocol and the Ontario Green Energy Act. Following these examinations I wish to explore how these acts operate in accordance with my proposed theory that environmentalism is being commodified through policy, and show how many of their implications to environmental usage have in cases aggravated several international development problems regarding the environment. Through a discussion of the very methods these policies use to mitigate climate change I will explore how they have embodied, institutionalized, and promoted the continued mass consumption of products while claiming to mitigate environmental harms and climate change. Thus, the intent of this thesis is generally to present several case studies to illustrate how green consumerism is adhering to the climate populist climate change movement, and more broadly speaking modern environmentalism, and subsequently to discuss the future implications of this social phenomenon.

In chapter one I present this short historical tracing of organizations and policies that have emerged in response to climate change. In this account, I note that until the late

1980s climate change did not ‘appear’ as a problem to the general public and international community. In this chapter I also attempt to give a summary of the many debates surrounding climate change, and present a myriad of the conclusions the IPCC has published in regards to this problem. I also introduce the main theories used in most contemporary international and western governments’ environmental policies.

Chapter 2 addresses environmentally motivated consumption, and analyzes how environmental risks influence the decisionmaking of consumers. This chapter seeks to review works on consumer culture, and then highlight how they may apply to the present case of green consumerism. I focus on attaching some of the ideas previously made regarding ‘consumerism,’ but I also theorize a particular consequence of combining environmentalist values with consumerism. I argue this to show how the consumption of environmental products, represented through green products, actually creates a society that is no longer focused on the actual threats from the environment, and rather diverts its attention towards consuming these products instead.

Chapter 3 evaluates some forms of green energy as well as presents dynamics of the GM restructuring plan, and seeks to show the social influences behind this strategy. I present the basic frameworks this plan is promoting, along with some contextual information surrounding this strategy to show how it is becoming a standardized representation of green consumerism at a political and corporate level. I then tie in a discussion of how this company is in fact endorsing environmentalism to promote consumerist behaviour which will possibly end in further environmental degradation.

Chapter 4, contains my central argument to what the social implications of a society driven to purchase and consume its way out of climate change might be. Using

my data from the GM restructuring plan, and those from the IPCC and the Kyoto Protocol, I push for a review of our current practices of solving environmental problems through the market system, and call for a re-evaluation of recent governmental strategies which focus on facilitating industrial development with the assumption that economic stimulus packages oriented around environmentalist theories will successfully promote a greener future. Based on the theory presented in Chapter 2, I suggest that there are in fact negative consequences with creating a large scale business out of environmentalism. I endorse the perspective of the 'treadmill of production' first coined by Allan Schnaiberg (1980) and argue that consumption essentially cannot produce conservation. I call for more fundamental changes, similar to those argued by eco-Marxists, in order for our industrial sector to become sustainable.

#### CHAPTER 1: A BACKGROUND OF INTERNATIONAL ENVIRONMENTAL AND CLIMATE CHANGE POLITICS/ORGANIZATIONS

Unlike international trade, where one centralized organization, the World Trade Organization, provides most international governance, no centralized authority oversees environmental issues. The United Nations (UN) does on the other hand play a large role; the United Nations Environment Programme (UNEP), a specialized agency focused on international environmental concerns, has facilitated the negotiation of many international environmental agreements, and acts as a coordinator for international scientific research (DeSombre, 2006: 1). But even organizations the UNEP oversees often have internal governments themselves, and many other organizations work without the oversight of the UNEP. The growth of international environmental organizations has been cited by one study in 1992 to have reached a number as high as 125 in 1992, and

most studies find that a growth of five annually since then has occurred (Oberthur, & Gehring, 2005). These organizations focus on biodiversity, the oceanic and atmospheric commons as well as the transboundary movement of environmentally hazardous materials. Whereas global trade is strictly monitored by the WTO, there is still a very broad spectrum of individual agencies and governmental bodies concerned with environmental matters throughout the world.

The UNEP has played active roles in environmental monitoring and scientific research on environmental issues; it has worked to build the capacity of states, non-state actors, and other international institutions to negotiate and implement international environmental agreements; and it has coordinated and supported the negotiation of international environmental agreements (DeSombre, 2006: 9). Since its inception in 1972, the UNEP has become the main agency concerned with environmental matters in the UN, with its head office located in Nairobi Kenya. Its creation has provoked arguments as to whether an independent agency is needed to address environmental matters, or whether these matters can be divided and addressed by other organizations such as the WMO, FAO, WHO, or the International Maritime Organization (IMO) by modifying their preexisting mandates. Other concerns over this body have focused on whether there should be instead a preference for regionally based approaches focusing on locally occurring environmental problems. Nonetheless this organization has grown well, especially when seen through its increasing budget from \$20 million in its first year to \$120 million in 2003. This growth in budget also seems to reflect a growing community of support by nations since only 3.9 percent of its financial resources comes from the regular UN budget. The rest of this budget is allocated from voluntary contributions

from states and other actors to the Environment Fund.

It was this organization which resulted from early international interest in environmental management. The first UN conference entirely focused on environmental issues was the UNCHE, held in Stockholm, Sweden, 5-16 June 1972. This conference was the first to recognize the importance of an international responsibility for studying the relationships between humans and the natural environment. It was the consensus from this conference that resulted in the creation of the UNEP. Since the UNEP's creation, the organization has taken the role of coordinating high-profile conferences, the most prominent of these being the Earth Summit or the United Nations Conference on Environmental Development (UNCED) held in Rio de Janeiro in 1992. These meetings were to focus on the effects of human development on the environment, and the results of these discussions revealed the depth of the North-South divide on issues concerning the environment (DeSombre, 2006). Concerns amongst developing countries were based on the argument that the development of international environmental regulations would place more pressure on themselves as opposed to developed countries. Their argument was also based on the premise that the developed nations of the world were most responsible for the current environmental problems. On the other hand, developed states demanded the acknowledgement of population growth as a factor in environmental degradation, and an equal allocation of responsibility for addressing environmental problems. At that time the Earth Summit was also the largest gathering of world leaders anywhere. Leaders from over 178 states attended, along with representatives from agencies of the United Nations and other international organizations. Two international agreements, the Convention on Biological Diversity (UNCBD) and the Framework

Convention on Climate Change (UNFCCC), were negotiated before this summit but just in time so that they could be signed in Rio (DeSombre, 2006).

Although this summit was the largest internationally focused environmental conference for its time, it has also been criticized as the pinnacle of "liberal environmentalism" (Bernstein, 2001). The agreements and protocols which have followed the Earth Summit largely reflect the dominance of the liberal international market system. The protection of the environment has since been clearly based on theories which focus on the compatibility of economic growth and environmental protection in the context of international markets. Environmental theorists who have traditionally looked at industry and capital accumulation as the root of the problems for the environment have strongly opposed the extent to which the Earth Summit in Rio, and its subsequent policies have institutionalized these very industries as the solution. Theorists from this point of view are often termed eco- or neo-marxists, and they point towards the inherent problems with capitalism in relation to the environment (Discussed later). Although these theorists themselves have been criticized for their own essentialist perspectives, it is clear that the Earth Summit in Rio has indeed institutionalized modern capitalistic economics into its environmental protocols.

Since the Rio Earth Summit in 1992, there have been two other similar conferences. In 1997, New York held a session for the UNCED, and in 2002 the World Summit on Sustainable Development took place in Johannesburg, South Africa. The general conclusion of this assembly was that the agreements met at Rio had been drastically undermet. Paragraph four of the Statement of Commitment by the General Assembly (UNGA, 1997) it states, "We acknowledge that a number of positive results

have been achieved, but we are deeply concerned that the overall trends with respect to sustainable development are worse today than they were in 1992. We emphasize that the implementation of Agenda 21 in a comprehensive manner remains vitally important and is more urgent now than ever".

Article 21 (UNGA,1997)was the main provision resulting from the summit in Rio in 1992. This Article outlines an agreement by all nations to a series of objectives and solutions to environmental problems. But as declared in 1997, trends in sustainable development had actually progressed in an aggravating direction. Globalization, a phenomenon encouraging faster and increasing industrial development, has only sped up the foreseen environmental degradation.

Along with concerns over environmental degradation, paragraph 7 of Article 21 (UNGA, 1997) also notes that with the increase of globalization, there has been an uneven rate of industrial growth amongst the world's nations, and consequently an uneven rate of wealth accumulation:

The five years that have elapsed since the United Nations Conference on Environment and Development have been characterized by the accelerated globalization of interactions among countries in the areas of world trade, foreign direct investment and capital markets...The impact of recent trends in globalization on developing countries has been uneven. A limited number of developing countries have been able to take advantage of those trends, attracting large inflows of external private capital and experiencing significant export-led growth and acceleration of growth in per capita gross domestic product. Many other countries, however, in particular African countries and the least developed countries, have shown slow or negative growth and continue to be marginalized...In particular the least developed countries continue to be heavily dependent on a declining volume of official development assistance for the capacity-building and infrastructure development required to provide for basic needs and more effective participation in the globalizing world economy. In an increasingly interdependent world economy, the responsible conduct of monetary and other macroeconomic policies requires that their potential impact on other countries be taken into account. Since the Conference, the countries with economies in transition have achieved significant progress in implementing the principles of sustainable development.

However, the need for full integration of these countries into the world economy remains one of the crucial problems on their way towards sustainable development. The international community should continue to support these countries in their efforts to accelerate the transition to a market economy and to achieve sustainable development.

Particularly interesting in this statement is the focus of declaring the main cause for the poorer countries' lack of sustainable development to be the lack of incorporation into global markets. In other words, this statement by the General Assembly in 1997 suggests quite clearly that one of the problems for the lack of worldwide development (and sustainable development) is because poorer countries have not been properly enabled entry to global markets by nations capable of providing assistance. As I will discuss in later chapters, there is an assumption within many of these arguments that the markets are the solution to the world's environmental problems, rather than part of the problem. Nonetheless, there was a general agreement in 1997 that poorer nations needed to be brought further into the global market system in order to gain the capacities to engage in sustainable development. The subsequent paragraph (8) in this document from the General Assembly (1997) states:

Too many countries have seen economic conditions worsen and public services deteriorate; the total number of people in the world living in poverty has increased. Income inequality has increased among countries and also within them, unemployment has worsened in many countries, and the gap between the least developed countries and other countries has grown rapidly in recent years.

Also acknowledged here, the General Assembly (1997) had noticed a trend towards a widening gap between poor and rich countries, but there is no discussion in this section on whether it is industrialization itself or the international capitalist market system which may be part of the cause. Instead, as shown in full here, paragraph 20 argues that richer countries (or creditor countries) will need to play a role in loaning

money to poorer nations in order to increase their capacity to achieve sustainable development:

In many developing countries, the debt situation remains a major constraint on achieving sustainable development. Although the debt situation of some middle-income countries has improved, there is a need to continue to address the debt problems of the heavily indebted poor countries, which continue to face unsustainable external debt burdens. The recent World Bank/International Monetary Fund Heavily Indebted Poor Countries Initiative could help to address that issue with the cooperation of all creditor countries. Further efforts by the international community are still required to remove debt as an impediment to sustainable development (par. 20)

As I mentioned above there is an assumption within these statements that economic growth is not only compatible with conservation, but necessarily essential for sustainable development to occur. The assembly therefore is arguing that poverty is a cause of environmental degradation, and that the solution lies in providing credit (ie. money) to these poorer nations. Thus economic prosperity and industrialization is seen here to be the actual solution to environmental degradation. This is an assumption which falls in line with an economic theory known as Ecological Modernization Theory (EMT). As I will discuss, there are many debates regarding the best eco-economic theories, but nonetheless it was clear in Rio, and in 1997, that this form of thinking was being used.

#### WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT, 2002:

In 2002, the UNEP was also responsible for a very large gathering in Johannesburg, South Africa. Taking place between 26 August and 4 September, the meeting was attended by representatives of 191 countries. As what occurred in the Earth Summit in Rio and in New York, there was a parallel NGO forum with more than 40 000 participants (Gutman, 2003). Similar to the conclusions found in 1997, most agreed that

the main shortcomings on issues of global environmental management and sustainable development were that the existing agreements set forth by the 1992 conference had still not been sufficiently implemented. Thus as globalization continued for another five years, there was still strong evidence that countries seemingly committed to the agreements made in Rio were not acting on par with their declared intents. Not only was this the general conclusion of this conference, the summit was also not attended by George W. Bush and the United States - one of the most influential countries. Consequently, the results of the summit were largely viewed as below expectations (DeSombre, 2006). The few achievements were that the conference placed economic issues, environmental issues, and social issues on an equal footing, acknowledging that these three issues are strongly interrelated.

Although the most recent UNCED summit has been viewed as not achieving its potential, it is clear that there has been a growing collection of international organizations focused primarily on environmental issues. The recognition by the international community that there is a global crisis, and that there needs to be collective responses to the world's environmental problems is strongly reflected in these organizations' existence. But there is also evidence that the effectiveness of these organizations is up for evaluation. As documented, each UNCED summit since the Rio Earth Summit has shown consistent conclusions that member nations are not meeting the standards they had agreed to. It is clear that industrialization, economic development, and production have taken a far higher position on the mandates of the international community. And as explained by the UNCED (shown above) not only has environmental degradation increased with globalization, wealth deprivation on the global scale has also increased.

Poor nations have fallen much farther behind richer nations in the 17 years since Rio. This only compounds problems associated with environmental degradation, as current methods for achieving sustainable development tend to be more expensive. Ironically, as globalized capitalistic economics have continued to spread throughout the world, sustainable development practices have also become too expensive for poorer nations to afford. Thus the paradox of spreading a free market system on a world-wide scale, and of using it as the basis for achieving sustainable growth, sustainable development practices and industries themselves have also become commodities which only those with enough money can buy. As stated by the General Assembly in 1997, poor nations will need to be provided funds by creditor nations if they are ever to be able to achieve more ecologically sensitive industries.

This paradox, which I will elaborate on in chapters 2 and 4, is central to my argument in this thesis. The tendency for environmental problems to be addressed primarily through the capitalistic markets has tended to result in many popular environmentalist goals becoming a products and instruments of industry. Thus the term green consumerism, which is often used to explain the habit of individuals to invest and consume environmentally friendly products, can also be used in a more abstract way here to describe how environmentalist policy is itself becoming commodified through the institutionalization of capitalistic economic global organizations which primarily focus on using neoliberal market-based methods to ostensibly achieve global environmental sustainability.

But before I enter this discussion, I wish to show in more detail some of the specialized organizations the UNEP has developed in order to explain the mechanisms

they use to achieve their environmental goals. I also wish to describe these organizations in order to show the magnitude of their influence specifically on climate change, as this is the relevant issue in this thesis. The United Nations Convention on Climate Change and the IPCC are now the topics to which we turn.

#### THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE AND THE IPCC

The Intergovernmental Panel on Climate Change [IPCC], established in 1988 jointly between the World Meteorological Organization [WMO] and the United Nations Environment Programme [UNEP], was one of the first international bodies concerned with climate change to form. This amalgamation began to illustrate how Climate Change was being addressed and recognized as a very real threat to the global environment. The IPCC has since become one of the figurehead organizations behind the movement to mitigate climate change. In its most recent findings, the IPCC (2007) has declared that global GHG emissions have increased by 70% between 1970 and 2004. According to the *Climate Change 2007: Synthesis Report* (IPCC, 2007a), observable trends regardless of any causes have shown amongst many others that:

Eleven of the last twelve years (1995-2006) rank among the twelve warmest years in the instrumental record of global surface temperature (since 1850)...Average Arctic temperatures have increased at almost twice the global average rate in the past 100 years. Land regions have warmed faster than the oceans...Increases in sea level are consistent with warming. Global average sea level rose at an average rate of 1.8 [1.3 to 2.3]mm per year over 1961 to 2003 and at an average rate of about 3.1 [2.4 to 3.8]mm per year from 1993 to 2003...Trends from 1900 to 2005 have been observed in precipitation amount in many large regions. Over this period, precipitation increased significantly in eastern parts of North and South America, northern Europe and northern and central Asia whereas precipitation declined in the Sahel, the Mediterranean, southern Africa and parts of southern Asia. Globally, the area affected by drought has *likely* increased since the 1970s...Average Northern Hemisphere temperatures during the second half of the 20th century were *very likely* higher than during any other

50-year period in the last 500 years and *likely* the highest in at least the past 1300 years...The atmospheric concentrations of CO<sub>2</sub> and CH<sub>4</sub> in 2005 exceed by far the natural range over the last 650,000 years (IPCC, 2007a)

Although this is a very brief summary of some of the main findings the IPCC has documented, there is also a good discussion in this report regarding some of the human and environmental consequences of these trends:

There is *very high confidence*, based on more evidence from a wider range of species, that recent warming is strongly affecting terrestrial biological systems, including such changes as earlier timing of spring events, such as leaf-unfolding, bird migration and egg-laying; and poleward and upward shifts in ranges in plant and animal species. Based on satellite observations since the early 1980s, there is *high confidence* that there has been a trend in many regions towards earlier 'greening' of vegetation in the spring linked to longer thermal growing seasons due to recent warming...agricultural and forestry management at Northern Hemisphere higher latitudes, such as earlier spring planting of crops, and alterations in disturbances of forests due to fires and pests...some aspects of human health, such as excess heat-related mortality in Europe, changes in infectious disease vectors in parts of Europe, and earlier onset of and increases in seasonal production of allergenic pollen in Northern Hemisphere high and mid-latitudes. (IPCC, 2007a)

Another report by the IPCC (2007b), titled *Climate Change 2007: Impacts, Adaptation, and Vulnerability*, focuses on the impacts on human-related issues gradual or dramatic climate change may cause. It assesses the particular vulnerabilities and impacts on various industries, geographic locations, economies and people of different social standings. Following these analyses, this document summarizes the capabilities of different societies towards adapting to climate change, as well as the future options available for adaptation. Regarding human settlements, a section in chapter 7 of this document states:

Climate change is likely to interact with and possibly exacerbate ongoing environmental change and environmental pressures in settlements. In areas such as the Gulf Coast of the

United States, for example, land subsidence is expected to add to apparent sea-level rise. For New York City, sea-level rise will accelerate the inundation of coastal wetlands, threaten vital infrastructure and water supplies, augment summertime energy demand, and affect public health (Rosenzweig and Solecki, 2001a; Knowlton et al., 2004; Kinney et al., 2006). Significant costs of coastal and riverine flooding are possible in the Boston metropolitan area (Kirshen et al., 2006). Climate change, a city's building conditions, and poor sanitation and waste treatment could coalesce to affect the local quality of life and economic activity of such cities as Mumbai, Rio de Janeiro and Shanghai (Sherbinin et al., 2006). In addition, for cities that play leading roles in regional or global economies, such as New York, effects could be felt at the national and international scales via disruptions of business activities linked to other places (Solecki and Rosenzweig, 2007) (IPCC, 2007b: p.347).

Furthermore, regarding people of different social standings, nationalities and genders the

IPCC states in this chapter that:

Especially in developing countries, where more than 90% of the deaths related to natural disasters occur (UNISDR, 2004) and 43% of the urban slums are located (UN-Habitat, 2003), the poor tend to live in informal settlements, with irregular land tenure and self-built substandard houses, lacking adequate water, drainage and other public services and often situated in risk-prone areas... Events such as the December 1999 flash floods and landslides in Caracas, killing nearly 30,000, and the 2001 severe flooding in Cape Town, damaging 15,641 informal dwellings, show us that the poor in these countries are the most likely to be killed or harmed by extreme weather-related events (Sherbinin et al., 2006)... Impacts of climate change are likely to be felt most acutely not only by the poor, but also by certain segments of the population, such as the elderly, the very young, the powerless, indigenous people, and recent immigrants, particularly if they are linguistically isolated, i.e., those most dependent on public support. Impacts will also differ according to gender. This happens particularly in developing countries, where gendered cultural expectations, such as women undertaking multiple tasks at home, persist and the ratios of women affected or killed by climate-related disasters to the total population are already higher than in developed nations (as cited in IPCC, 2007b: p. 373-374)

Just as the different implications for specific communities are mentioned, the affects climate change may have on governments are also referred to in this section:

Government/institutional capacities and resources could also be affected by climate change. Examples from Mexico City, Tokyo, Los Angeles and Manila include requirements for public health care, disaster risk reduction, land-use management, social services to the elderly, public transportation, and even public security, where climate-related stresses are associated with uncoordinated planning, legal barriers, staffing shortages and other institutional constraints. As Hurricane Katrina has shown, it is likely that if things go wrong people will blame “the Government” (Sherbinin et al., 2006). To avoid such outcomes, governance systems are likely to react to perceptions of growing stresses through regulation and strengthening of emergency management systems (IPCC, 2007b: p. 374)

These reports by the IPCC have been long held as the most authoritative and comprehensive studies regarding the impacts of climate change. As shown above, although there are many natural consequences and implications of climate change, this environmental problem has a vast amount of effects on human settlements, economies, and policies. This body has in many ways led the climate change movement through its extensive and holistic natural and social science studies. The research that has taken part in the IPCC has also become so large in scale and quantity and has been done by such a large group of experts that it has become widely accepted by many in science, politics, and civil society that climate change is a ‘real problem,’ not just some scientific hoax, or politically motivated social phenomenon. And as a result it is clear that climate change has become a commonly cited environmental problem in the contemporary world.

The United Nations Framework Convention on Climate Change [UNFCCC] was formed after the Rio Earth Summit in 1992, with the ultimate objective as described in Article 2 (UNFCCC, 2009) to achieve “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.” Since the creation of both the IPCC and the UNFCCC, these organizations have become the unofficial authorities on the science behind climate

change.

Probably the most well known policy the UNFCCC has created regarding international climate control is the Kyoto Protocol (United Nations [UN], 1998), which now has over 180 countries as signatories. However, this document has taken many years in order to actually become ratified. Also, since its creation in 1997, vital members such as the USA, (while under the direction of George W. Bush) have withdrawn their signatures from this document even though the USA is also a nation which is documented to be responsible for approximately 25% of the world's GHG emissions. Without signatories such as the USA it is unlikely that the Kyoto Protocol will be a sufficient framework for mitigating long term global climate change.

Although these organizations have illustrated at least some form of international concern for climate change, it is still questionable whether their suggestions for change have or will be properly made by many of its signatories. Beyond this issue, I wish to argue that the very essence of policies such as the Kyoto Protocol fail to provide environmental goals that will result in long term and large scale change, primarily because it is an economically driven policy. The Kyoto Protocol is an agreement which sets minimal goals for nations to meet, and also focuses on producing a credit system based on carbon. This credit system is known as a method which commodifies carbon, and attempts to reduce carbon through setting entrenched targets that all signatories must meet by a specified date.

In combination with this form of progress, it has also become apparent that these industries have been guided by policies focused on promoting individual actors of society to invest and consume such products, reflecting what are often considered consumerist,

and neoliberal ideologies (see Rose, 1999; Szasz, 2007). The newly drafted government and industry policies which target the reduction of carbon production, focus much more on enabling consumers to invest into these businesses in order to stimulate large scale change regarding GHG emissions, rather than establishing tighter regulations on these industries to reduce their production of carbon. This trend reflects a modern form of governance known as neoliberalism which focuses mostly on providing individual citizens within the public sector with policies that promote individual freedoms from government regulation. Most essential to this form of governance is the reduction of direct governmental regulations on industry, business, and trade.

#### THE KYOTO PROTOCOL

It was thus the UNFCCC and its most influential provision the Kyoto Protocol that has had the most noticeable publicity regarding the push for international support for mitigating climate change. The Kyoto Protocol (UN, 1998) states that it is "an international and legally binding agreement to reduce greenhouse gas emissions worldwide, entered into force on 16 February 2005." Its major component features binding targets for 37 industrialized countries and the European community for reducing GHG emissions. These reductions amount to a lowering of emissions by five percent against 1990 levels over a five year period between 2008 and 2012 (UNFCCC, 2009). This agreement also recognizes "that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity. As a result, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities" (UNFCCC, 2009).

This agreement works to meet these goals through three main mechanisms: 1) emissions trading, or "the carbon market", 2) the Clean development mechanism (CDM), and 3) Joint Implementation (JI). Firstly, emissions trading is based on the restrictions for tonnes of carbon produced by each country. These targets are expressed as levels of allowed emissions, or "assigned amounts," over the 2008-2012 commitment period. The allowed emissions are divided into "assigned amount units" (AAUs) (UNFCCC, 2009). Emissions trading is outlined in Article 17 of the agreement, and allows countries with emissions to spare - emissions permitted to them but not used - to sell these to nations that are over their limits. The idea is that as long as the targets are used as the basis of the trading for carbon, world wide carbon reduction will occur no matter whether some nations exceed or fail to meet their reduction targets. In many ways, a new commodity has been created by this mechanism. Carbon is now tracked and traded like any other commodity.

The CDM works in a similar way. This mechanism focuses on the trading of responsibility for GHG emissions through the recognition that certain development projects promote overall reduced GHG emissions. Quite simply, a country or business which takes part in developing something which is recognized as low-carbon, or which will promote the sequestration of global carbon levels will be allotted an amount of credit towards carbon production equivalent to what these projects are speculated to reduce. Typical projects falling under this mechanism might be the development of solar panels, or some other form of renewable energy. These projects are referred to as emissions reduction projects, or a standardized emissions offset instrument. Joint Implementation is simply the protocol's recognition that one country can develop an emissions reduction

project in another country, while receiving credit for that project towards their national emissions targets.

These three components of the Kyoto Protocol have since become the most mainstream mechanisms for many other local and national governments to enact carbon reduction policies. It has become quite apparent that since Kyoto, this market-based approach to reducing carbon has become the favoured and most acceptable method in both governmental and business related areas of decision making in many areas of the West. In general, this agreement has found a way to make the reduction of GHGs a marketable and tradable enterprise, therefore making it a commodity which can be sold and purchased. It was thus the Earth Summit at Rio de Janeiro which at first established the UNFCCC and the subsequent promulgation of the Kyoto protocol which "cemented a form of international policymaking process in which industry and economic growth are central to the way the environmental protection is negotiated" (DeSombre, 2006, p.28). The Kyoto agreement can be seen as the first attempt to make an international environmental regulation system which focuses on creating economic benefits from the protection of the environment. It is this approach, most generally known as ecological modernization theory (EMT) which has also been the subject of much academic debate over how governments can engage in a form of sustainable development. Despite opposition by critics, EMT is (especially since the 1980s) the most favoured theoretical approach to environmental management. It is this approach which is most relevant to the interests of my research on green consumerism in this thesis; and a summary of its academic and political backgrounds is essential for my research in order to show how other political ideologies have contributed to its widespread use in modern environmental

policymaking.

#### THE MODERNIZING APPROACH

Since the ending of the Cold War the majority of nations around the world have been "penetrated by the global processes of trade, competition and production that reflect Western values and economic and political dominance" (Blowers, 1997: p. 845). Instead of a conflict between two large opposing economic powers, we have witnessed the emergence of one model, that of the international capitalist economic system, since the end of the 1980s. Although it can be argued that other forms of economic strategies have retained influence in sections of the world, or that every nation has their own version of capitalistic economics in place, environmental concerns are being addressed by most countries in a similar fashion on several levels. Ecological modernization has thus become the predominant theoretical approach to accommodating environmental concerns in the West. This method reflects many of the values and ideologies of modern Western economics particularly since the 1980s. Ecological modernization theory, as Blowers (1997) writes, "holds that while environmental constraints must be taken fully into account, they can be accommodated by changes in production processes and institutional adaptation. It is consistent with environmentalism and may be seen as an extension of the process of modernisation" (p. 847). In this perspective the ecological problems of the world are not problems, but instead opportunities for industry to modernize and solve. Industrial innovation encouraged by the market economy and initiated by an enabling state will achieve the objective of long term sustainable development. This is also an inherent assumption found in this philosophy; a belief which has not been substantiated by empirical evidence. In this theory there is an essential reliance on industry to lead the

way towards environmental protection and sustainability, and there is a fundamental assumption that the environment will be protected in a comprehensive manner primarily by relying on private industry and mechanical modernization. Frances Cairncross (1995) articulates his and many others' appeal to this philosophy when he writes: "But merely to oppose growth will achieve little. Instead a wiser strategy for environmentalists is to look for ways in which growth and environmental improvement support each other, and to study ways to protect the environment at minimal economic cost." (p. 4)

Ecological modernization theory contains several basic features (Mol, 2002; Mol and Spaargaren, 2002; Christoff, 1996). First, and probably most importantly, ecological modernization introduces ecological criteria into traditional production and consumption processes. It assigns a pivotal role to science and technology in resolving ecological crises, and focuses on increasingly refining the production process towards cleaner and more environmentally sustainable methods. Second, the market economy is viewed as the best way to promote flexibility, innovation and quick responsiveness for assuring the ecological adaptation of industry. The government only provides enabling regulatory frameworks which assist the efficiency of the markets. Individual consumers are thus the primary actors who are responsible for the evolution of industry towards sustainable development.

This theory, although it tends to be widely used by contemporary Western governments (several case studies will be provided in Chapter 2), has several theoretical and practical weaknesses. As Blowers (1997) suggests, it relies on both the free markets and the government to operate. While the state is to remove barriers and facilitate free market business, it is also expected to retain the responsibilities and costs of education,

welfare, and infrastructural construction. Thus while appealing to business by alleviating tax burdens, the state is still expected to facilitate other social services in society. In practicality, social welfare systems suffer greatly through this philosophy, and ideals to increase ecological regulations do not become realized as these also require increased funding from taxpayers for enforcement. Relying only on modernization, does not ensure any sort of precautions against potential disasters from development, nor does it set out precedents which must be followed through the advancement process. This approach relies more on a laissez-faire market system and allows individual entrepreneurs and industries to stimulate change. This shows a weakness in EMT's assumption that the free market and the state can always work compatibly to meet environmental goals.

Nonetheless, this theory has become widely accepted by governments, organizations and agencies around the world which are committed to environmental protection. As stated by Blowers in regards to the UN Commissions' Brundtland Report (UNGA, 1997):

The Brundtland Report exudes ecological modernisation. The UN Commission on Sustainable Development has imbibed the doctrine. And the UK's strategy on sustainable development pronounces, "Sustainable development does not mean having less economic development: on the contrary, a healthy economy is better able to generate the resources to meet people's needs, and new investment and environmental improvement often go hand in hand. (HMSO, 1994, p. 7 - as cited in Blowers, 1997: p. 854)

The Brundtland Report launched an era of sustainable development on the international stage, but it did so under the pragmatic yet imperfect philosophy of market based policies. The economic rationalization of environmental problems has since purveyed international development policies and accordingly the most dominant perspective on environmental policy in the last three decades has clearly been an

economic one. Even the language usage in the IPCC's (2007b) report associates a tie between economic development and environmental sustainability: "It seems likely that if extreme weather events become more intense and/or more frequent with climate change, GDP growth over time could be adversely affected *unless investments are made in adaptation and resilience*" (376-my emphasis).

John Dryzek (2005) states that "this perspective goes by different names in different places: market liberalism, classical liberalism, neoliberalism, and free-market conservatism. Sometimes it is even personalized, and becomes Thatcherism in the UK, Reaganomics in the United States, Salinastroika in Mexico (after President Salinas de Gotari), or Rogernomics in New Zealand (for finance minister Roger Douglas)." Although this philosophy has many names for it (I will use neoliberalism), its main components rely on a confidence in the efficiency of the markets.

In the current Canadian context, the Ontario Green Energy Act, which at the outset announces its commitment to simultaneously promotes economic growth and ecological sustainability, also exudes EMT. The document states in its introduction that "The purpose of this Act is to facilitate the development of a sustainable energy economy that protects the environment while streamlining and improving the environmental and planning approvals process, mitigates climate change, engages communities and builds a world class green *industrial sector*. The Act will enable all Ontarians to participate and benefit from green energy as conservers and generators, at the lowest cost to consumers" (OGEA, 2009a, my emphasis). This introductory statement shows a very pronounced and strong commitment towards connecting industrial growth to ecological sustainability, which is fundamental to ecological modernization theory.

Although ecological modernization has become a widely used form of environmental policy, one that coincides with 'sustainable development' - which is also a form of environmental rhetoric focused on showing the compatibility of modernization to environmental sustainability - it is not a theory which derived independently from social and political ideologies, especially in the last 30 years. Industrial modernization is not by any means a new method for solving environmental problems which humanity faces, but the extent to which industry and economics are relied upon in this theory has also emerged in a time where political philosophies have evolved to promote both free market capitalism and the increase of the production/consumption process.

The sovereign state which oversees the practices of its citizens, including industrialization, is often viewed as archaic by the political right in North America. Accordingly, allowing industries and private actors to self-regulate has become a predominant practice, throughout many nations of the Western world. This may be the result of ideological underpinnings in certain influential nations, as well as even imperialistic motives (Jameson, 1993). Free markets, when all actors begin with equal resources, imply equality, at least in theory. In reality, when deregulation of governmental policies occurs, some nations begin the economic game with more power and influence than others. This 'freedom' then results in a situation more likely to entail appropriation of the weaker parties' resources. As the weaker parties do not benefit from systems to protect their resources, the more powerful nations have easier access to them. Even if there are pragmatic benefits to market-based methods of sustaining the environment, problems with wealth accumulation and the escalating prices of commodities based on supply and demand, provoke questions about the true motives

behind the push for these policies. Also, questions arise whether the long term implications of these policies actually suggest ecological sustainability. Social theorists have long argued the inherent problems with capitalism, but when regarding the environment social theorists have begun to show the similarities between capitalist societies and the natural environment. Known as eco- or neo-Marxists these theorists have documented many problems with capitalisms' relation to the environment.

#### ECO – (NEO) MARXISM:

The very basic production-consumption processes which currently thrive in the Western world are important to analyze as a subsidiary purpose to this thesis. As I described above, ecological modernization is based on the premise that capitalism, the free markets as well as the current industrial and commercial production processes which exist, can be maintained while the environment is conserved. Thus, the idea is that the environment can be continuously exploited while the environment is being adequately conserved because technologies will continue to modernize and reduce their environmental impacts. But eco-Marxists (or also eco-socialists, or neo-marxists) such as James O'Connor (1994; 1998), Peter Dickens (2002), Allan Schnaiberg et al. (2002) and John Bellamy Foster (1999;2003) have long held that the most inherent threats to the environment come from current industrialization processes themselves. As well, capitalism and mass consumption are viewed quite strongly as antithetical to environmentalism.

Schnaiberg et al (2002) have particularly tackled the production-consumption practices of Western capitalism. In the paper the “Treadmill of Production and the

Environmental State,” a historical analysis of how the production processes have changed in the second half of the twentieth century is given. As they state:

A major change appeared in the impact of production processes upon ecosystems in the last half of the 20th century...Ironically, we have returned to this theoretical dual valence at the end of the twentieth century. Among environmental sociologists, proponents of ecological modernization (EM) have postulated that there is a growing independence or "emancipation" of the ecological sphere from the political and economic spheres in state and industry policy-making (Mol 2002; Mol and Spaargaren 2002). Within each of these spheres there are significant institutional transformations stimulated by leading firms, who have been driven by the pressures to reduce the environmental impacts of their past production processes. In sharp contrast, our own political-economic model argues that such firms tend to minimize, or even undermine, progress on ecological goals, as well as social ones. Proponents of political economy models urge increased mobilization and opposition to socially and ecologically oppressive actions by major private sector actors and the state, which often defers to these actors... In this paper, we set out to frame these two special issues of *Organization & Environment* by outlining the model of the treadmill as a political-economic context for the so-called *environmental state*. Contrary to ecological modernization theory, we find that economic criteria remain the *foundation* of decision making about the design, performance and evaluation of production and consumption, dwarfing any ecological concerns. Further, the state also shares this orientation, despite its varied political interests, and often cedes a great deal of power to private sector actors. We view this as highly problematic for creating conditions for sustainability and ecological responsibility. (p. 2-3)

Schnaiberg et al. (2002) have identified the reality that as large industrial firms have become highly influential in environmental policymaking, the private economic sphere is becoming less regulated by the political sphere. Furthermore, they argue that these large firms are influencing policies which are essentially detrimental to long term ecological conservation. They argue that transitions in production processes have occurred due to five axes of change: economic expansion, increased consumption, solving social and ecological problems by speeding up the treadmill, economic expansion via large firms, and alliances among capital, labour and governments.

In this paper they situate the current production process within the context of a treadmill. They argue that as large industry has become more profitable and dominant,

garnished profits rose exponentially, which could then be used more to invest in further development. This has resulted in the highly intense and remarkably fast pace of development primarily since the 1960s. But as companies have invested more into their own industries they have also required greater withdrawals from the ecosystem, and the results have been that the environment is increasingly used as “sinks” for toxic wastes, degrading ecosystems around the world.

The essential arguments that Schnaiberg et al (2002) attempt to make in this paper are that the production processes have become reliant on the continued exploitation of the environment, and that the main economic ideals of capitalism inherently prevent ecological protection. The present political-economic landscape values, above all else, the continuation of production, and large firms (referred to as ‘treadmill’ firms) tend to oppose regulations at every opportunity. As globalization has increased, governments have only made lax efforts to prevent some pollutants from entering the ecosystem, but have done very little if anything to regulate the amount of resources being extracted. They argue that governments have settled for a trade-off with large industries, meaning that they will regulate just enough to retain political legitimacy but will allow large firms to exploit to prevent them from undermining governmental agencies.

The summit at Rio, as well as the Kyoto protocol, are also used as examples of efforts by governments to *appear* as if they are regulating, whereas in reality they have had almost negligible effects on the production processes of the world. As well, they use these examples to support their vehement opposition to EMT’s theory that ecosystems have been liberated by the economic sphere, and believe that current production processes are in fact inherently detrimental to the environment.

The main point is that the fundamental barrier to achieving sustainability is that the ideals of production, expansion, exploitation, and consumption are actually 'embedded in the current form of social organization and as a result economic criteria is always the foundation of decisionmaking. The logic of the system itself does not allow for genuine or effective environmentalism to occur. Within this system environmental protection can only be achieved through a loss of capital, and since accumulation and goals of expansion are paramount in this system, the environment will continue to be exploited. Ecological and economic concerns are thus fundamentally incompatible, within any form of capitalism.

Despite these criticisms, capitalism, in the form of free markets and trade liberalization, has become more widely accepted on the international stage. Free trade, embodied by organizations such as the World Trade Organization and the World Bank, are illustrations of how desires for worldwide economic expansion and accumulation have increased rapidly in the last twenty to thirty years. In the next section I wish to show more directly how economic and ecological policy has become increasingly deregulated in the last several decades. I wish to describe this change in order to show how and why EMT has become the most widely accepted theory in modern environmental management, despite criticisms. I also wish to describe some of the implications this change shows with respect to long term environmental sustainability.

#### THE CONSUMER'S SOCIETY, DEREGULATION AND NEOLIBERALISM

Economically-based theories for managing the environment may be both popular and pragmatic, but the widespread acceptance of these theories in politics is likely due in part to increased social acceptance of their implicit ideologies. The contemporary

reliance on the consumers to stimulate changes, the appeal to individual freedoms as well as the backing of mass production and highly efficient industrial processes, has surely had an impact on the political philosophies used in environmental management. I argue that the acceptance of neoliberal, economically rationalist philosophies in environmental management have largely gained approval due to the values and culture of Western societies. Scientific management and the focus on producing as much as possible with the least amount of labour involved has become iconic of the twentieth century in the West. I find it thus highly improbable that these processes have not in some ways affected the ways politicians as well as individual citizens perceive environmental policies. As neoliberalism has and still does influence contemporary policies on the international and national scales, environmental policies have followed suit. Thus, I find it relevant to discuss here some of the ways neoliberalist ideals have influenced modern environmental management. In short, how has the government and the consumer been affected and interpreted through recent policies?

In order to understand how these changes in environmental policy have come about, it is necessary to understand the assumptions and premises that have made these ideas “thinkable, sayable, and doable” (Miller & Rose, 2008: p. 3). The understanding of social and political ideologies which have similar ideals as ecological modernization theory, as well as other forms of market-based environmental management strategies is relevant for analysing how environmental management is embraced by western culture. I argue that how the environment is protected at a political, and economic level does not escape the prevailing ideologies of the West and it is important to understand that these strategies for saving the environment also operate within a “particular vocabulary or

language that circumscribes what can be said and what can be done in ways which are meaningful” (Miller & Rose, 2008: p.3). The economy of a certain region is not a single domain, excluded from the prevailing values, morals and beliefs of a society. An economic system, as all other social or political systems tends to endorse or exclude various ideals through its very design. Thus, the economy can be viewed as a zone constituted by “certain ways of thinking and acting” (Miller & Rose, 2008: p.8).

Neoliberalism is largely an economic political theory that argues that the market should be allowed to make major social and political decisions, the State should voluntarily reduce its role in the economy, corporations should be given total freedom, trade unions should be curbed and citizens should be given much less rather than more social protection from the state (George, 1999). This form of political thought reached mainstream approval most noticeably in the early 1980s under the Reagan and Thatcher regimes of the United States and Britain respectively. A radical change in government began which saw fast paced deregulation of government processes. Often seen as bureaucratic obstacles, governmental regulation systems were reduced, and the direct influence of the state was diminished. Environmental, health, educational, and social services were downsized and diminished under the pretense that the private sector could compensate for these losses and ultimately become more efficient at providing such services. The main philosophy was that laissez-faire market based systems were the most efficient, as well as promoted the most “progress.” Regulations were regarded as inefficient and clumsy. As stated by a then (1988) vice-president of the United States, George Bush “Call me, I’m in the dereg. business” - documented in the film *The World According to Monsanto*, (Marie-Monique, 2009).

Neoliberalist ideals were at this time used as a framework for designing what the government should and should not be active in. As Graham Burchell (1991) has said, 'Liberalism repudiates *raison d'etat* as a rationality of rule in which a sovereign exercises his totalizing will across a national space" (p.42). Under advanced liberal governments there is a belief that the government cannot govern with ultimate authority because it lacks the appropriate knowledge and capacities to do so. Ruling a nation must instead be focused on utilizing the domains of the market, civil society and citizenship with the aim of ensuring that they function to benefit the nation as a whole (Miller & Rose, 2008). Accordingly, the two poles of "power over life" which Foucault (1977, 1993) termed disciplines of the body and biopolitics are emphasized in neoliberalist thought. State systems such as schools and prisons seek to produce the conditions necessary for self-regulation and self-motivation, as the government is now responsible for guiding a collection of 'free' individuals (Rose, 1999).

Specifically in regard to environmental policies, this form of privatization which is emphasized by neoliberalism is seen more effective for protecting the environment than governmental regulations in the form of public protected lands, or laws which forbid certain practices. The reliance on self-regulation is emphasized in present environmental management. In short, the government is getting out of managing the environment.

Those who endorse neoliberalism also endorse a sort of economic rationalism. Because people tend to care more for what they own than what they own in common with everyone else, privatizing will apparently promote a better large scale protection of the environment. If the whole of the environment is owned privately each individual will take care of his or her property to result in a commons which is collectively protected.

Economic rationalists of this sort believe they have solved the well-known problem of the 'tragedy of the commons' (see Hardin, 1968). By dividing the commons into private properties, the landowners then have personal interests in seeing their lands protected. This solves the problems associated with 'free-riders' and people who do not take steps to protect publicly owned lands.

Although there has not been a complete privatization of all lands in North America and Europe, there has been noticeable shifts of selling off public lands to private investors. Governments have allowed private investors to use public lands for profit (Dryzek, 2005). The emerging pattern is that the individual, or private owner, is now emphasized when it comes to environmental management. Self-regulation is the 'way to go' in modern times. Centralized organizations which oversee the use (and often abuses) of lands are either being downsized, being given different protocols, not being given political strength or are vanishing altogether. It is increasingly up to the individual(s) and owners of certain natural habitats to look after them.

However, the implications can be very frightening when one thinks of owners of large scale industries such as those in the oil, forestry, fishing and mining businesses as responsible for protecting the environment when their revenues rely solely on the appropriation and use of natural resources. Even though one can argue, for example, that the fisheries will have incentives to protect the stocks of fish in order to continue to prosper, history has shown clearly over the world that this has not been the case (see for example the study by Worm et al, 2006). The east coast of Canada has seen a once very lucrative Cod fishing industry completely collapse because of over fishing. Lack of quotas, and government enforced regulations allowed continued overfishing to occur. In

Lake Ontario the Atlantic Salmon and American Eel fisheries are also on the brink of collapse (see MacGregor et al, 2009)

History has shown that it is much more likely for the short-term profits of a certain area to take precedence over the long term profits seen through protection strategies. As long as another location is still in existence for an industry to move to exploit, it will not have a sufficient incentive to protect resources. An industry may simply uproot and move to a new location to again begin its extractions. Long-term foresight of the environmental implications within industry is not well documented in the reality of industry, and the economic rationalist philosophies which have reached political acceptance are therefore in need of moderation.

As the UN General Assemblies of 1997 and 2002 note, national targets for environmental sustainability are consistently not being met. Free-market liberalism has not necessarily shown great potential for sustainable development. And although ecological modernization triumphs the use of the market for achieving sustainability, there has not been much empirical evidence to substantiate this. Compounding this issue, the bleak projections by the IPCC and its three working groups regarding climate change show that the amount of change needed on a global scale is not simply in the line of market reforms, but instead in the form of fundamental changes to the production and industrial processes we see today.

Neoliberalism has surely influenced these economic-rational perspectives, and its economic implications around the world have also been noted since its preeminence (see for example: Monck, 2003). In 1997, the Inter-American Development Bank (IDB) published an article named *Latin America After a Decade of Reforms* (IDB, 1997) and

wrote that Latin America's economies "present a disturbing and paradoxical picture...Macroeconomic imbalances have been corrected...Practices of government intervention have been dismantled...Nevertheless, the economic results are unsatisfactory...Unemployment rates have risen...Income distribution remains worse than in any other region of the world" (p. 31). Accordingly, the pressures made by Northern countries, such as the US, on South America to develop liberalist economic policies have resulted in a multitude of economic and ecological problems. For example, at the end of 2001 Argentina experienced a dramatic economic collapse. This has been touted as a concrete failure of the International Monetary Fund's neoliberalist policies in regard to long term economic security for developing nations (Monck, 2003). Argentina inevitably was forced to default on its foreign loans, and its peso devalued to approximately 3.5:1 US dollar by the end of 2002. As Ronaldo Monck describes:

Joseph Stiglitz, renegade ex-World Bank chief economist, blamed the IMF for forcing an austerity programme on Argentina in the middle of a recession. The pro 'free market' magazine *Forbes*, more surprisingly, declared that the new government in Argentina should sue the IMF for 'malpractice and negligent homicide'. For mainstream economist Paul Krugman, 'Argentina's crisis is a US failure.' For others, on the left, the case of Argentina simply proves, once and for all, the failure of IMF policies to establish the basis for long-term economic growth in low-income countries (McEwan, 2002-as cited in Monck, 2003).

As the economic and social consequences of neoliberalist policies have shown negative economic consequences such as those shown above, the ecological implications are often just as bleak. As the Bruntland report (shown above) in 1997 states, globalization and the increased development of free-market policies and fast paced industrial development intensified since the 1992 meeting at Rio de Janeiro while environmental degradation on the global level had increased. This makes one wonder whether the proclaimed efficiency of 'self-regulated' markets actually do imply positive

effects for the environment, or if there is an inherent contradiction between de-regulation and environmental sustainability. There seems to be only an increasing volume of evidence that free-market neoliberalist policies do not necessarily result in more worldwide prosperity, or environmental sustainability.

Although the implications of neoliberalist policies on developing nations has not necessarily brought signs of improvement, I also find that there is a connection between the appeals to neoliberalism, and the desire to orient the economy and culture of these states around a 'culture of consumerism.' It is the concept of consumer culture which I wish to focus on in the next chapter. Focusing on previous studies of consumer culture and attaching some of these ideas to particular cases of green consumerism will hopefully show the connections I wish to illustrate in this thesis that a market-based, neoliberalist society is now 'consuming' environmental problems through a Western cultural logic.

## CHAPTER 2: RISK, CONSUMER CULTURE, AND CLIMATE CHANGE

“bottled water sells for more than gasoline?!”

It is indeed true that bottled water now costs more per litre than gasoline. Upon frequenting the local variety store while I was taking a break from this research, I noticed that the cost of a one litre bottle of water was priced at \$1.39. The gas price at that day was, comparatively, at a bargain price of \$0.964 per litre. Although one can argue that the packaging of the bottled water adds to its price per litre, one must still wonder how even that small amount of plastic used in the bottle can make up the difference between what oil and water costs to the average consumer. If prices were solely based on supply and demand this price would seem to be a rip-off considering that 70.78% of the world is covered with water (although most of this is not fresh water). Despite these facts, water

is indeed a popular commodity, and according to Andrew Szasz (2007) “Today, bottled water is the nation’s (USA’s) second best-selling beverage. It outsells coffee, milk, and beer. Only carbonated soft-drinks still sell better” (107).

The immediate question that comes to mind is “how?” How can water, a resource which seems to be so plentiful in the world, become a product which is now costing more than oil, a resource which requires extensive amounts of labour, industrial development, and extraction processes before reaching the pump? Water now seems like a product one can simply place in a bottle and sell for a marked-up value with no clear reason or justification. The price of oil is affected by a diversity of factors; water on the other hand requires little-to-no refinement before it is placed on store shelves.

Although there is likely an argument that the way the market system now works, the price of water is inflated because of marketing and packaging costs, I still wonder how this has become the current state of things in our marketplace. As this chapter will explore, I am interested in understanding how the culture of the West has indeed become a culture of consumption. And more specifically, I am interested in understanding how ‘green consumerism’ has gained massive appeal within this culture.

According to Statistics Canada (see Statistics Canada, 2008) bottled water is a product which the privileged sections of Canadian society enjoy most often. Water, which is a necessary component of any person’s diet is now a commodity of the elite when found in a plastic bottle. However, there is also an interesting correlation between education levels and bottled water consumption. Statistics Canada found that bottled water consumption increased progressively between those who identified as ‘less than highschool’ education to those who identified as ‘some post-secondary’ education (the

group that consumes the most). However, those who have completed university education consume the lowest amount of bottled water out of all of the categories. Whereas high income households often share characteristics with those with high education, according to Statistics Canada, (2008) “drinking bottled water is not one of them” (p. 3).

According to this conclusion by Statistics Canada as the consumption of bottled water has increased, it has done so mostly within higher income groups. As I stated in the previous chapter regarding the use of liberalist marketing systems for creating sustainable development, as environmentally focused products and ideals are marketized and made into commodities, they become products which many cannot afford. The reliance on individuals to purchase their way towards sustainability fails to account for those with low incomes. Furthermore, as the Bruntland report suggests, worldwide disparities of income have only increased since 1992. Thus many cannot financially afford to ‘save’ the environment.

Although bottled water is not a product which is marketed to save the environment, it is still marketed with environmentally influenced ideas. It is by no means a ‘green’ product, but it shares similar marketing strategies with those products which are seemingly ‘green’: environmental risks are used to validate the use and purchase of the product. Environmental concerns in the case of bottled water are used as motivators in order to convince consumers they need to purchase water rather than use their taps as a supplier. Thus I wish to use this case as an analogy to the contemporary case of green consumerism in light of climate change.

Consumers are being convinced that they are better provided with water by

private companies rather than public systems. Consequently the ability for one to choose from a selection of sources of water appeals more to many individuals today than obtaining water through a public source. This could be an example of what Andrew Szasz calls *inverted quarantine*, and I will discuss this phenomenon and its implications in the next section.

#### ‘PURIFIED’ CONSUMPTION:

In the example of bottled water, I am interested in how environmentalism (or at least many of its ideas) is used by businesses to create a new form of consumerism (ie. an environmentally-motivated consumerism). Furthermore, I am interested in how consumers are embracing products based on environmentalist concerns, as well as the product’s own symbolic associations to these issues. In short, what is the overall implication of a consumerist culture embracing environmentalist values? As Featherstone (1991) states, there is a sort of symbolism that works within the act of consumption: “Symbolism is not only evident in the design and imagery of the production and marketing processes, the symbolic associations of goods may be utilized and renegotiated to emphasize differences in lifestyle which demarcate social relationships” (p.16). I thus ask the questions: what are the driving forces behind this wide appeal for products such as bottled water, and what are the implications of this event? Also, is the main driving force perceived risks, or are there also other elements which have assisted in the success of this product?

According to Andrew Szasz (2007), the public’s concern over water quality is not always without informed reason. Szasz (2007) documents that the USGS (Kolpin et al, 2002) “took samples from 139 rivers in thirty states and tested for pharmaceuticals,

hormones, and other postconsumer contaminants; they tested for ninety-five different substances and found eighty-two of them, a variety of antibiotics, several types of steroids, reproductive hormones, prescription drugs (analgesics, blood pressure medicines, antidepressants), nonprescription drugs (acetaminophen, ibuprofen), deodorizers, fragrance, plasticizers, detergents, antimicrobial disinfectant, and fire retardant” (p.114-115). Szasz (2007) explains these results: “Water pollution is the daily, ongoing, inevitable, normal consequence of the way we live in our cities, how we grow our food, and how industry produces things that we consume. Water pollution is inscribed in our way of life” (p.116). But regardless of these findings, the Environmental Protection Agency (US. EPA) of the United States still declares that 87% of rivers and streams, and 82% of lakes designated as sources for drinking water meet legal standards (US. EPA 2000 – as cited in Szasz, 2007, p.116).

Although the EPA asserts that most of the US’s drinking waters are safe, public confidence in this agency’s competence for ensuring safe tap water seems to be low. The consumption of bottled water has increased dramatically in the last twenty years, and this is evidence that us consumers (ie. individuals) are indeed concerned about their water supplies. According to the International Council of Bottled Water Associations (ICBWA, 2003), bottled water consumption (per-capita) in the US increased from 67 litres to 90 between 2000 and 2003. Comparatively, Canada almost doubled from 26 to 46 liters per-capita consumption a year and Western Europe increased from 93 to 112 liters. Production value worldwide during this timeframe also went from a staggering \$30,819,000,000 to \$45,772,000,000. Something has convinced consumers worldwide to purchase water, water that is ‘natural,’ ‘clean,’ ‘fresh,’ or “The taste of purity” as claimed

on the website for Aquafina (2009). The long standing appeal of bottled water has created the fastest growing consumption rates of any beverage. Only very recently in 2008 has the consumption of bottled water shown any sign of decline (-1.8% annual US consumption per-capita) since 1997 (see International Bottled Water Association [IBWA], 2008). And according to the IBWA reasons for this decline may have been due to exceptionally cold and damp weather in the summer, the weak economy, as well as environmental campaigns targeting bottled water.

It is evident that bottled water appeals to modern consumers, but it is questionable as to whether the average consumer is fully informed of the facts on water quality while making their decisions. The Water Quality Association (WQA) (2001 – as cited in Szasz, 2007) found that 75 percent to more than 80 percent of Americans tell pollsters that they are concerned about tap water. This is found in spite of the U.S. EPA's statements that most of the US's drinking water sources are 'safe.' Although the EPA's standards may be lax, non-comprehensive, and not designed effectively (see Szasz, 2007), the EPA is the government body which oversees water quality. Based on consumption trends it seems that the consumer has more faith in the claims of the bottled water industry than that of their own government. On another note, it is clear that the fears of environmental contaminations have won over the consumer, and consequently a social phenomenon is occurring in North America as well as many other places in the world, which involves individuals reacting to and addressing these threats of their own accord.

Szasz (2007) believes that this trend has resulted in a contemporary US society that reacts to environmental threats such as contaminated water in what he names *inverted quarantine*. Inverted Quarantine is a concept similar to *quarantine*, but different

in that it is a process undertaken by a collection of individuals, and based on individual decision-making. Traditional *quarantine* involves a public confident that the overall collective environment is safe and healthy and that risk originates from a discreet source, such as a diseased person. Consequently, the community acts together to isolate that individual to ensure the public remains healthy. *Inverted quarantine* is, on the other hand, a social phenomenon which begins with the assumption that the overall environment is already contaminated and full of health risks. Individuals are considered healthy vessels who must avoid being contaminated by their surroundings. Risk is not discreet, it is everywhere. As a result, the only way individuals can protect themselves is through isolation from the risks by creating barriers between themselves and the contaminants. And in contemporary US society, Szasz argues that individuals have turned towards investing in technologies or products which assure them of their protection from these hazards.

How then does the bottled water phenomenon compare to what is now occurring with regard to climate change? Is there a similarity in how technologies and products are being marketed to consumers? It is my argument in this section that this trend for contemporary individuals to perform inverted quarantine in light of risks is well-known by both governments and businesses. Both of these bodies are aware of contemporary individuals' appeal to take personal steps towards protecting themselves. Accordingly, governments and businesses are endorsing policies which focus responsibility on individuals to invest in technologies to avoid environmental risks. And as both consumers and governments are performing these roles accordingly, a culture of consumption is reaffirmed and the production treadmill is reinforced. EMT as described

in chapter 1 is a policy reflective of this trend. This inverted quarantine response is provoked by certain institutions in order to establish a new and potentially lucrative market: the 'green industry.' These organizations are aware of these perspectives of consumers, and they market their products in accordance with peoples' fears. In the next chapter I will use the marketing of GM's restructuring plan as an example of how governments and businesses are addressing these consumerist tendencies, as well as how they are reinforcing the values of a consumer culture in order to promote economic progress.

But before I enter this discussion, I wish to describe specifically how I view consumer culture. I ask: what drives consumption other than risk? What other factors can be taken into account in light of mass consumption? The next section attempts to describe another possible phenomenon in relation to green consumerism.

#### BEYOND RISK:

Although there is a specific tendency for individuals to perform inverted quarantine it is possible to analyze the commodification of environmental problems on a more abstract level. With the example above still fresh, I wish to argue that the mass consumption of bottled water (and as I will establish later, other 'green' products) is also occurring because the consumption of bottled water has become normalized within Western culture. Although risk associated with contaminated public water provoked this habit, I believe there are many who consume it in high quantities also because it has become a social norm to do so. I believe that in many cases individuals who are purchasing products such as bottled water are not consciously doing so because of their fears, but now because of the habits and other meanings attached to this behaviour. The

original meaning for purchasing bottled water (that of the fear of contaminated public supplies) I argue may no longer be the only (and maybe even no longer the main) influence behind the decision to purchase such a product. I believe this is largely because of the very culture of Western society which conceptualizes change mainly through the production and consumption process.

Authors such as Fredric Jameson have argued that particularly since the 1950s and 60s, a postmodern culture has developed in the West. What he often terms 'postmodernism' is also referred to as a 'depthless' or 'schizophrenic' society, where "depth is replaced by surface, or by multiple surfaces" (Jameson, 1993, p.318). Meanings and associations between objects are now copies of copies of which no original actually existed. In this perspective bottled water is not enshrined with the meaning of 'avoiding contamination' but instead carries meanings which are mostly subjective to each individual. One might buy bottled water because it tastes good, or because it is convenient, or even simply because they can. Those with the disposable income to do so may not have any grand meaning behind their decision to purchase this product other than that they are thirsty at the time and can afford to purchase it. To Jameson, chains of meanings are now broken and fragmented, and much of society now views objects with only surface meanings. This is due to mass communications, and the spread of mass consumption in light of advanced capitalism. As communication and transportation technologies are quickening the interactions of the global society, the structure of meanings and symbols is becoming much less solid. Consequently, an advanced form of capitalistic logic has begun to pervade the thinking patterns of much of the world.

I find that this interpretation of the effects of consumerism on the culture of the

West describes issues which are relevant to the relationships between consumers and green products. Commodities are not given fixed meanings which remain entrenched in Western culture instead they exemplify how meanings can be subjective. The commodity never means just one thing. Instead its meanings are often derived independently from consumer to consumer. But a generality that does exist in this process is the 'cult of the commodity,' or the perpetuated habit of consumption. I describe this as an inherent desire typical of Western culture, to appropriate and consume as much merchandise as is feasible to their own situations. Those with the income to do so therefore satisfy their cultural role primarily as the consumer.

How then does a consumer relate to their products within this mass inflow of meanings? In the age of the internet, mass media, cell phones, high speed travel and global markets, is it likely for a cultural habit to carry the same meanings from person to person, or generation to generation? As Stuart Hall (1984) has suggested, meanings are constantly encoded and decoded through a circular and social process. Thus, is bottled water still perceived by the average individual primarily as a way to avoid contamination, or is the consumption of it also related to its many other meanings which have been socially constructed since it has taken such a large role in society? Much like many other products such as cigarettes, energy drinks, dietary supplements and alcoholic beverages which have reached high levels of acceptance in society, bottled water has likely also benefitted from this normalization as well. Products which may seem arbitrary at the outset, can very likely reach a level of acceptance as more consumers purchase these products. Szasz (2007) writes that many consumers purchase water for health reasons, convenience and taste. Thus we cannot (and Szasz recognizes this as well) conclude that

only fear of risk has ensured the incredible growth in the bottled water industry. I argue that risk, although it may often begin a phase of consumption, does not always remain the primary cause once the trend has been set in motion. If risk alone causes consumption at this rate then with the amount of other environmental threats in the world, it seems bottled water would not be the only environmentally motivated product to see such widespread sales.

I therefore wish to put forward the argument that consumption of products has become a fundamental way of life in the West, and the process of doing so reinforces the cultural expectations that all individuals must take independent responsibility when solving their problems, and they also must satisfy their primary roles as the consumer. As Bauman (2005) has argued, in the age of consumerism the wealthiest individuals are the most powerful consumers. Being the most powerful consumer is now equated with being high in social standing. Furthermore, I believe that the neoliberalist policies and capitalist systems which have gained increasing strength in the last twenty or so years are a major influence on this phenomenon. In other words I ask: is it possible that there is an inherent logic now pervading contemporary Western culture, which frames the thinking patterns of modern consumers to purchase their way out of these problems which is also influenced by something other than their fears? Is the consumer's appeal for purchasing bottled water, hybrid cars, renewable energies etc. only due to perceived risks, or is there another element at play? How has this idea for one to purchase water from a selection of names and brands at inflated prices become more 'logical' than acquiring it simply through the home faucet? Are there power relations which construct a form of knowledge within this consumerist culture and which subsequently influence one to accept their role

primarily as the consumer? As Foucault (1993) once stated, “Indeed, it is in discourse that power and knowledge are joined together...we must not imagine a world of discourse divided between accepted discourse and excluded discourse, or between the dominant discourse and the dominated one; but as a multiplicity of discursive elements that can come into play in various strategies” (p.340). Thus I find there has been a multiplicity of discourses and knowledge constructs which have helped develop consumerism as a fundamental aspect of Western culture. Although the fear of contamination is without doubt a contributing factor of this consumption of bottled water, I feel that in the present state of affairs, there is also a very strong influence from the very culture in which this is occurring which can also be analyzed. The answer to the question: how has the individual also become identified as the ‘problem solver,’ or the one with the ‘responsibility,’ can shed light on this phenomenon.

In the next section I will review some perspectives on consumer culture and compare them to some particular examples of ‘green,’ or environmentally-influenced consumption patterns. I thus wish to identify both how green consumerism operates within an apparent ‘logic’ of consumer culture in the West, as well as describe a particular implication green consumerism holds in regards to long-term environmentalism. In short, what are the implications for environmentalist ideas and values when they become embraced by the postmodern consumer?

#### CULTURE OF CONSUMPTION

Much literature has been written on ‘consumer culture’ (see for example Baudrillard, 1983; Baudrillard, 1993; Featherstone, 1983; Featherstone, 1987; Featherstone, 1991; Jameson, 1993). Accordingly, there are many perspectives and

analyses of this 'consumer culture' as its causes and effects are described in diversity.

Michael Featherstone (1991) categorizes perspectives on consumerism into three main groups:

First is the perspective that consumer culture is premised upon the expansion of capitalist commodity production which has given rise to a vast accumulation of material culture in the form of consumer goods and sites for purchase and consumption...Second, there is the more strictly sociological view, that the satisfaction derived from goods relates to their socially structured access in a zero sum game in which satisfaction and status depend upon displaying and sustaining differences within conditions of inflation. The focus here is upon the different ways in which people use goods in order to create social bonds or distinctions. Third, there is the question of the emotional pleasures of consumption, the dreams and desires which become celebrated in consumer cultural imagery and particular sites of consumption which variously generate direct bodily excitement and aesthetic pleasures (p. 13).

Out of these perspectives I find that the first most accurately describes the main cause for the emergence of consumerism in the West. And with regard to green consumerism, I find that all three perspectives are relevant to this thesis. As I, as well as eco-Marxists have argued, there seems to be a tendency for environmentalist concerns, values, and ideas, to be enmeshed within a sort of capitalistic 'logic.' As I wish to establish here, consumer culture carries with it an essential form of logic that shapes its solutions to environmental problems in a predictable manner. In this regard, solving environmental problems must be done so through consumption practices. Individuals satisfy their role as consumer before anything else, in order to protect themselves from environmental problems. Technological and political changes must first be stimulated by the interests of individuals. Thus, in regard to EMT as described in chapter 1, Western culture likely endorses this method of environmental policy because it matches its already established values (ie. Rugged individualism, entrepreneurialism, laissez-faire economics, egoism, free trade etc.). And with the spread of capitalist economics since

the end of the Cold War, I argue that a cultural shift has also occurred which situates the individual in more areas of the west primarily as the ‘consumer.’ This is not to suggest a society entirely led by consumerist logic, but at least one much more so led by this logic than what was witnessed before the mid-20<sup>th</sup> century. I argue that to a large extent many people now accept and embrace their role primarily as the ‘consumer’ in modern Western society and this is strongly related to the consumerist culture that has been progressively developing since the end of the second world war. The strength of neoliberalist policy and capitalist systems throughout the international political systems as described in Chapter 1 have strongly influenced what I wish to argue is a consumerist culture which has spread across the West and has reshaped the cultural logic of more of the international community.

Similar to the ideals of neoliberalism, in consumer culture the individual is the ‘free’ and ‘autonomous’ vessel, who can choose to, or choose not to participate, invest, or cooperate with different social and economic activities. The wide appeal of both neoliberal policy and this social identification of individuals foremost as consumers are heavily influenced by the dominance of capitalist economics throughout the West. Fredric Jameson (1984) once wrote that “this whole global, yet American postmodern culture is the internal and superstructural expression of a whole new wave of American military and economic domination throughout the world: in this sense, as throughout class history, the underside of culture is blood, torture, death, and terror” (p. 316). Furthermore, Jameson argued that what is referred to as ‘postmodernism’ is actually in its most essential processes, a more pure form of Capitalism. To Jameson, postmodernism is a departure from the ‘older modernism,’ which viewed things such as political and social

defiance, and sexually explicit material as offensive. The 'politics of aesthetics' takes precedence in this postmodern culture, and as Baudrillard (1993) argues, there then forms a culture where meaning is found in a 'hypereality' or a 'simulacrum.' Meaning now 'floats' within an artificial landscape where signifier and signified are no longer structured. The signified (in Saussure's use) has now lost its essential meaning, and the signifiers now float about in this hypereality (or through mass media and the internet for example) to be used and discarded as needed by individuals. As Jameson (1993) states "Meaning on the new view is generated by the movement from signifier to signifier" (p.324). Jameson considers this a state of social 'schizophrenia' where the hermeneutic link between signified and signifier no longer exists in any comprehensible mode.

With regard to the act of consumption, I find that these theoretical positions relate well to the processes involved in consuming green products. With the consumption of green merchandise, there is the need for the producers to reinforce and create reasons for the consumers as to why they should purchase these products. Their products must be attached to some sort of meaning that they will help the environment. But the chances that these original meanings will remain consistent once sent into the public landscape are slim. Therefore I argue that in the contemporary world, which communicates instantly, travels at great speeds and consumes relentlessly, the original meaning of any social habit that may develop has very little longevity. Clearly the longevity of meanings are not easily obtained in a present world with mass communications, incredibly fast paced marketplaces, international flows of information and cultural mixings that have never been seen before. I suggest that although the consumption of a product such as bottled water may have begun with the goal of addressing the fear of contamination, it

has now in many cases lost its original meaning in contemporary society. I argue that in the case of bottled water, the mass consumption of it was stimulated by a fear but has since likely lost much of its original meaning, and now many are habitually purchasing this product without always being consciously aware of their original motivations. I feel this is likely because of the extent to which bottled water is the only food or beverage product which claims to protect consumers from environmental contaminants which has reached such staggering success. The amount of education on the use of pesticides and herbicides in foods, as well as the modification of genes in many crops have reached mainstream media, yet foods which claim to protect consumers of these dangers have not gained fractions of the sales water has. Although it is likely also more than just habit which has produced the sales figures of bottled water, I believe it is a large reason for these high rates of consumption.

I am skeptical that the fear of contamination alone has brought people to purchase water more than almost any other beverage in the world. I find that although this likely ignited the habit of purchasing it, I also feel that once water became a commodity, the consumer became habituated to purchasing water, and that the marketing agencies behind this product have ensured a continued development of this habit among consumers.

Bottled water has not just achieved great sales because of everyone's fears of contaminated water, it has become normalized through its very commonality. As this normalization has occurred it has only benefitted more; a snowball effect has taken place so that purchasing water is no longer just a way to ensure health, it is just simply normal to drink it.

What then is the implication of this type of phenomenon? If the original (and indeed environmentally motivated) reason why one purchases a product becomes forgotten, what happens to the likelihood of long-term environmentalism in the masses? As Andrew Szasz (2007) argues, when people move towards inverted quarantine a phenomenon he calls *political anesthesia* occurs. Szasz argues that if all individuals begin to shun the outside environment and instead begin to produce barriers around themselves to avoid environmental risks, they reduce their capacity to begin collective environmentalism: “Tens of millions of citizens believe they have successfully insulated themselves from the problems of the public water supply because they drink bottled water or because they filter the water coming into their homes. They continue to care about water quality, but is there any real motivation left to do anything more about it?” (p.201). I agree with Szasz’s analysis here, and my above argument that people have also forgotten about the original environmental problems altogether can strengthen aspects of this theory. I am also not hesitant to argue further that consumers often lose the urge to be active about environmental problems through their preoccupation with consuming their ways to safety. Simply by purchasing their way towards a ‘safe zone’ consumers reach a point where they no longer worry about environmental problems. Why worry about terrible water quality or global climate change if ‘you are responsible for change’ and you have done what you can? Simply, I argue that the entire process of consuming ‘green’ products separates the consumers from the actual threats. Too indirect of a process to instill social dissent, green consumerism as a solution to environmental problems results in ‘political anesthesia,’ not collective ‘environmental activism.’ Thus when a consumerist culture embraces these environmentalist perspectives, the original

meanings are lost and the act of consumption takes over. The consumer becomes too busy purchasing products which seem to signify ideal meanings, but in the process the original intent of saving the environment becomes lost. I wish to call this *consumer amnesia*.

I will now focus this theoretical position within the relevant context of climate change and show how this *amnesia* exists in the political and business incentives behind green consumerism. Renewable energies and hybrid cars both show a pattern: marketing through risk, relying on consumers to invest and purchase, and then relying on establishing widespread production and consumption. I find this to be a pattern which in itself results in long term environmental amnesia. Through the very processes we use to solve environmental problems, I find that economic goals override those which are ecological, to the extent that they are almost forgotten. In the next chapter, I wish to analyze how certain carbon clean energies have reached a dramatic level of acceptance in business and governments and show how environmental goals have been lost as well as the implications of unregulated approaches to creating environmentally benign energies. I will then describe how General Motors and the US and Canadian governments have been pushing for the ‘modernization’ of the auto industry within the logic of consumerism, and neoliberalist policies as another example of this problem.

### CHAPTER 3: GREEN ENERGIES AND THE AUTO INDUSTRY

Consumerism does not promote an environmentalism focused primarily on the environment, especially when endorsed by governments. As I wish to outline in this section, the increased establishment of renewable energies and the promotion of modernized automobiles do not reflect genuine environmentalism, instead, they reflect a

Western culture's interpretation of environmental threats and consequently express this culture's ideal methods for ameliorating its perceived problems. Hydroelectric, solar, wind, tidal, geothermal, and bio-energies have all gained approval by governments and businesses in recent times due to their use of 'sustainable' and 'perpetual' energy sources. As climate change has become the 'problem of the age' the energy industry has felt the critiques of a surge of concerned citizens accordingly. The burning of fossil fuels as the world's primary source of energy has now become the topic of debate in light of the findings concerning climate change. As I presented in Chapter 1, many international organizations have been formed strictly in reaction to this growing global threat. And these political responses to climate change are largely due to the mounting scientific research which has concluded that the causes of climate change are mostly anthropogenic. The IPCC's continued research has shown a consistently high likelihood that there will be severe and long-term consequences of our current consumption and burning of fossil fuels. As shown in chapter 1, the IPCC concludes that there are many likely specific consequences regarding the natural environment, as well as human settlements in regard to climate change. Thus, energies which are not derived from fossil fuels have gained incredible amounts of support on the international scale as well as the national level. For example, as I introduced in chapter 1 the Ontario government of Canada has been in the process of drafting a new act which ensures streamlined development of renewable energy systems. Named the Ontario Green Energy Act (OGEA, 2009b), this proposed statute will enable "all Ontarians to participate and benefit from green energy as conservers and generators, at the lowest cost to consumers" (p.3). This Act is, in theory, supposed to enable a quick and largely unregulated establishment

of a 'green energy' business in Ontario. As renewable energies are deemed to be green because of their low impact on climate change, this Act seeks to provide legislation which allows private investors as much autonomy as possible in order to enable a quick and streamlined process of developing this industry. As well, the consumer is situated within this Act as the highlighted actor who will take on the most responsibility for revamping the province's energy supply. Policies which focus on ensuring that a transfer to green energy is economically viable to consumers are reiterated throughout this Act. Furthermore, individuals who qualify as 'vulnerable consumers' will be allotted further help from the government for them to modernize their domestic energy systems (ie. heating, and cooling systems). Thus, instead of providing tighter regulations on existing energy industries, this Act reflects the neoliberalist form of governance I outlined in chapter 1.

Accordingly, there is an assumption in this Act that 'green' energies are those which are essentially 'carbon clean.' But there is a problem with this interpretation, as many of these contemporary forms of renewable energies can and have had negative effects on the environment, especially when they are not developed with proper precautions. Ultimately, a particular issue which arises from an 'environmental' Act such as this can be found in the present environmental problems that have accumulated from hydroelectric dams in Ontario. The neoliberal methods used in environmental management ask the government to make take direct action on the industries which actually cause damage to the environment. Instead, governments take 'arms length' approaches, which focus instead on providing legislation which enables individuals to be the origin of industrial change. Direct government involvement is seen as a last resort to

other methods. The development of environmentally benign industries must first be motivated through a consumer's demand for this industry. But as this chapter will illustrate through actual cases, there are fundamental flaws with this direction of management.

#### HYDROELECTRIC DAMS AND MARINE LIFE

Hydroelectric dams are considered to be a green energy within the Ontario Green Energy Act. As the proposed statute (OGEA, 2009b) states, "Green Energy" means conservation, renewable sources of energy and clean distributed energy" (p.1). Since hydroelectric dams are carbon clean and are a form of renewable energy, the act concludes that they are essentially green technologies which will both assist in ameliorating the climate change problem while also creating a source of energy that will be overall beneficial to the province of Ontario. But as I wish to show in this section, these dams can be quite damaging to the environment as well.

Studies by MacGregor et al (2009) have documented the immense amount of damage hydroelectric dams have caused to populations of migratory fish in Lake Ontario, the Ottawa and St. Lawrence rivers and the North American Coastline of the Atlantic Ocean. On the Coast of the USA, from Maine to Florida, at least 15,115 dams restrict or prevent fish passage, leaving up to 84% of Atlantic coast river and stream habitat inaccessible (Busch et al. 1998). The mortality rates of fish, particularly the Atlantic salmon and the American Eel have been large due to their migratory lifecycles. MacGregor et al. (2009) documents the historic and present scope of mortality rates: "*The New York Times* (1906) reported that eels had become so abundant in the Connecticut River at a "local electric light plant" that they clogged the wheels and eventually stopped

them... As recently as the 1970s, eel mortalities due to turbines were so highly visible in the St. Lawrence River that Ontario Hydro annually hired contractors to pick up and dispose of metric tons of eel carcasses below the Ontario side of Moses-Saunders Dam” (p.723). Major hydroelectric dam construction began in the early 1900s and appears to have peaked in the 1950s-1960s in Canada and the US (MacGregor et al. 2009). As the construction of these dams have occurred the mortality rates of migratory fish have increased cumulatively. Present day statistics on the population levels of the American Eel in Lake Ontario show a 90% drop from population levels at the turn of the twentieth century.

Although hydroelectric dams are not the sole cause of the loss of these fish, they have had a major impact. In combination with the fisheries in Ontario and the US, these migratory fish have become decimated and are presently extirpated from many inland ecosystems. Since this issue has been documented, debates over the appropriate strategies for possibly replenishing these populations have arisen. A particular complexity to reaching solutions lies in the very nature of the species’ life cycle: they are migratory species which travel through more than 25 jurisdictions throughout their lives. Thus, as with many other environmental issues, this problem is not situated within one political jurisdiction. And as with many other environmental problems, management has failed to foresee cumulative effects industry can have on the environment. The lack of large scale consensus and bi-national agreements on development protocols has resulted in fragmented management of this problem.

The context of environmental problems is often lost through the actual management strategies used in present day governance. Hydroelectric dams have

historically been evaluated on a case by case basis over a period of several decades; environmental impacts were only reviewed in site-specific contexts. But these approaches neglected to take into account the contexts of the species' populations. Similarly, fisheries across North America are evaluated across numerous jurisdictions, with little considerations of overall populations (MacGregor et al. 2009).

It is evident in this case that what is considered to be a 'green' energy in the Ontario Green Energy Act is in fact not entirely true. Although hydroelectricity has great potential to help mitigate climate change, concerns remain with how this technology is used (also see Fujikura, 2009). The designation that this energy is inherently green fails to take into account the decimation of two species of fish in North America (not to mention the many other species which are affected by these same technologies the world over).

What I wish to pull from this example is the potential for certain products to be marketed as environmentally friendly to the public, while there may be many negative consequences from their use. The Ontario Green Energy Act markets itself as an Act which will "facilitate the development of a sustainable energy economy which would protect the environment while streamlining and improving the environmental and planning approvals process" (OGEA: Proposed Green Energy Act, 2009b). The Act proposes that all energy systems which are considered green be streamlined for approval by the government. This implies that systems such as hydroelectric dams will be pushed through formal environmental assessment stages in order to grant developers of these technologies quicker approvals to begin construction. The concern here is that the government has not taken into account the amount of ecological damage that may occur

if these projects are not adequately assessed before commencing construction. This seems to be a reflection of the haste for governments to implement alternative energies at any cost. But with documented proof of the dramatic harm these technologies can and have caused it is very disconcerting that the government is increasingly lax with regulations on these industries.

I find that this scenario reflects the lack of attention given to the original motives to change the energy infrastructures. Climate change and overall environmental conservation are apparently the goals of this Act, but it seems that there is more of a focus on the economic benefits of green energy. This Act is supposed to contribute to environmental conservation, but upon actually reading the various components of this policy, it is clear that economic motivations are stronger than those which are ecological in origin.

For example, in this document's Procurement Order (OGEA, 2009b), there is a short summary of what the Ontario government must promote in order of priority upon the introduction of this policy: 1) all economic conservation, 2) all economic renewable generation, 3) all economic waste heat recovery, and 4) all economic, dispersed, high efficiency generation. This procurement order signifies a very intense emphasis for addressing economic interests directly through the repeated articulation of the word "economic." This could be analyzed as a specific method of legitimizing this Act within a primarily capitalistic society, by ensuring that one cannot miss this policy's strong commitment to Ontario's economic wellbeing. Consequently, this is again a reminder of market-oriented, neoliberal and capitalistic motives within the document, and further evidence of the predominant values of Western culture.

Even more interesting in this policy is that only two out of the seventeen sections in this document (sections 15 and 16) are directly focused on issues related to environmental conservation, and neither of these sections mention anything of the potential harms green energy can produce, nor is there any mention of precautionary approaches that will be taken to ensure conservation when developing these industries. Instead, these sections discuss only how this policy will make it as efficient and easy as possible to implement these technologies. In section 16, “Protecting the Environment” only a few mentions of placing regulations on where these technologies may be placed are found: “the Lieutenant Governor in Council may make regulations that: contain clear, prescriptive provincial standards for the siting of green energy projects (eg. “no go” areas, setback requirements, etc.). and that determine areas in need of protection. Restrictions should be area specific and based on legitimate and peer-reviewed scientific data.” Although this signifies some recognition that projects cannot be performed anywhere, this Act only ensures that the Lieutenant Governor *may* make such regulations. There is no articulation of the exact protocols or any mention of how these “no go” areas will be decided upon. Also, there have always been regulations under the Environmental Assessment Act of Ontario which have been in place for years, but have rarely been enforced. As MacGregor et al. (2009) document, one of the main causes for the decimation of the Atlantic Salmon and American Eel in Lake Ontario is that the dams constructed did not provide adequate bypasses for these fish. These bypasses (also known as fish ladders) could have been constructed for very little extra cost to Ontario Hydro, and there were also regulations in place that required these to be made. But the lack of enforcement of these regulations allowed these dams to be built outside of the

legal requirements.

Moreover, this Act suggests in the “Protecting the Environment” section (16) that the Lieutenant in Council may make regulations: “Prescribing shorter timeframes eg. Six months, and clearer deadlines for the completion of the planning/review process under approved Environmental Assessments.” The irony of this section is that it is titled “Protecting the Environment” while at the same time it endorses protocols that allow for streamlining environmental assessments and approvals for industry. Shortening this process, and streamlining assessments, promotes carelessness rather than ‘protection.’ Long has it been known that the introduction of technologies to the environment without proper precautions, assessments and research has resulted in disastrous consequences. DDT, Agent Orange, PCBs, Nuclear Energy (especially Chernobyl) as well as hydroelectric dams have played serious roles in the overall environmental degradation of our environment. As this Act is mostly concerned with streamlining projects rather than establishing clear protocols to follow when creating these industries, I argue that this is a further sign that environmental motivations are not the goals of the government, and never were to begin with.

Whereas consumers may not always remember the original goals behind their decisionmaking, government often fails to remain committed to environmental goals because of large responsibilities in promoting economic progress, and this problem is emphasized within neoliberals governance. Economically focused management decisions often prevent genuine environmentalism to be promulgated through statutes. This tendency is the result of market based political systems absorbing environmentalism and consequently reshaping the original meanings behind these movements to fit the

motivations of economic interests. In short, ecological issues become assimilated to economic issues, and this has negative consequences when the actual environmental issues at hand lose attention and become smeared by the economic shortsightedness which pervades Western Capitalism. Thus, what happens to environmentalism when it is introduced to Consumerism and Capitalism? It becomes modified and molded in the melting pot of Western Consumer Capitalism. Environmentalism essentially becomes consumed by consumerism.

Although this Green Energy Act attempts to show a motivation to mitigate climate change, when one reads its contents it is clear that this motivation is only a subsidiary goal to the promotion of economic prosperity. It is suggestive that climate change is used by this policy as a motivator to initiate the growth in a new market, and with the lack of clear protocols to ensure these technologies will actually promote environmental protection, it is clear that climate change is not the main motivator, and this is clearly because the focus on promoting consumption in our current political and economic climate must trump any potential interests in conservation.

It seems that climate change has reached such a level of concern that any technologies which have the potential to ameliorate the atmosphere are automatically considered 'green.' In a time when the consumer is largely relied upon to invest in change, it is important that consumers are also well informed when making their decisions. Whereas the Ontario Green Energy Act is hoping to promote a large scale change in the energy infrastructures of Ontario, it is important that those who might invest in such changes are aware of the potential effects their decisions may have on the environment. This illustrates a flaw in relying on consumerism and market systems to

initiate change. Consumers are not always concerned with, or well informed about the environmental problems they face. Market systems rely on the consumption of products which consumers desire. But what guarantee is there that the most popular ‘green’ products consumers will invest in are actually the most effective at establishing environmentally benign change? Consumers may interpret hydroelectricity as inherently green in the face of climate change, and as a result this may become a desired alternative to fossil fuels, but if there is not a large awareness of the potential damages these technologies can cause, what guarantee is there that these technologies will not simply solve one environmental crisis in exchange for another? Also, if technologies such as these become widely popular, is it possible that the economic profits from these technologies will overlap the original environmental motivations? As I argued in Chapter 2, the reliance on the market system and consumers to instill change will necessarily result in a loss of the original purpose of any sort of energy conversion that may occur. The Ontario Green Energy Act refers throughout the entire document to its commitment to ensuring economic progress and throughout the document green technology is consistently connected to projections of creating jobs, economic growth, financial security for Ontario and the protection of consumers. What is disconcerting about this is that the purpose of this Act, which *was* to ensure an energy system that can mitigate climate change “at the lowest cost to consumers,” seems to, in reality, commit to legitimating itself through its potentiality to save the economy, not the climate. This is a consequence of using market based strategies to achieve ecological goals. As I argued earlier, there is an inherent logic within this system, and fundamentally, saving the environment purely for the environment’s sake does not follow this logic. The only way

the environment can be saved within this line of thinking is if profit can be made out of its protection. The result of reshaping environmental goals within this logic is that the original purposes for any policies become lost. Whereas this Act shows an intent to mitigate climate change, it is clear that economical interests have overridden these interests to the point where it not only matches the logic of consumerism, but also prevents conservation from becoming feasible. This Act is clearly a strategy for achieving economic growth and there is little concrete policy which describes exactly how it will mitigate climate change. But the very fact that this ostensibly 'green' Act drips with the logic of consumption shows more evidence of the manner in which environmentalist goals may become absorbed into governmental policies really only motivated to instill industrial change. The whole Act derives from the assumption that 'clean' technologies are 'green' and that simply establishing more of these systems will mitigate climate change. But since this Act works from this assumption, it gives little concrete information on how these technologies are actually inherently beneficial to the environment, and also does not establish what assessment strategies will be used to ensure the proper construction of these systems. Instead, this Act consistently ensures the reader that the government is intent on strengthening the economy.

In the next section I will describe how General Motors has been formulating its own 'green revolution,' and I will articulate how this company in cooperation with the US, Canadian, and Ontarian governments are illustrating the aforementioned dynamics of modern neoliberalist environmentalism. I wish to frame this next section within the concept of *Corporate Environmentalism*, which is a term I use to define the way businesses modify environmentalism in their marketing. Since I have analyzed the

various roles of the international community's, the consumer's, and the government's roles in green consumerism, I find it fitting to complete this analysis with a contemporary example of how large corporations are becoming green.

#### MODERNIZING THE AUTO INDUSTRY:

The appeal of automobiles which run on alternate forms of energy has resulted in a noticeably increased rate of sales in recent years. According to J.D. Power and Associates (2007), sales of hybrid cars in the US rose approximately 35% between 2006 and 2007, as the numbers sold rose from 256,000 to approximately 345,000 respectively. Among the sales of these cars, the Toyota Prius is the highest selling hybrid car on the market. Of all the hybrid cars sold in 2007, approximately 50.6% of them were the Toyota Prius. This has resulted in a relatively positive image for Toyota in the eyes of many environmentally motivated consumers (J.D. Power and Associates, 2008).

A study by J.D Power and Associates in 2008 focused on compiling online discussions of consumers. The number of positive comments for each brand of cars as well as the amount of total posts overall regarding each brand was compiled. Based on the findings, J.D. Power and Associates divided car manufactures into four groups. The groups were: pacesetters (having higher-than-average volume and higher-than-average positive sentiment); contenders (lower-than-average volume but higher positive sentiment); emerging (higher-than-average volume but lower positive sentiment); or challenged (lower-than-average volume and low positive sentiment). Toyota topped the list for *pacesetters* but was also followed closely by General Motors. Although this study is not perfect in interpreting the actual perspectives of automotive consumers, it presents a broad illustration of which brands of automakers are viewed as the most progressive in

terms of environmental sustainability. And it is apparent in this study that GM has become considered one of the more progressive manufacturers in recent times.

But this positive sentiment has not necessarily resulted in increased overall profit for GM. As I began to describe in the introduction of this thesis, General Motors has been in the process of a very major restructuring strategy throughout 2009. GM filed for chapter 11 bankruptcy protection in the first quarter of 2009, and has since been largely bought out by the US Treasury Department, as well as the Canadian and Ontarian governments (see introduction for exact percentages). Projections for the success of GM after this bankruptcy are not good when considering that 90% of companies that enter this form of bankruptcy fail within three to five years. Throughout this whole restructuring plan, it has been clear that the governments who have supported this company are motivated to redirect the focus of GM towards a more 'modernized' and 'eco-friendly' business. In fact, the loans that these governments have provided GM are attached to some stringent environmental requirements which GM should ultimately meet as a condition of the use of this money.

Barack Obama announced on June 1<sup>st</sup>, 2009 " I am calling Congress to pass fleet modernization legislation, that will provide a credit to consumers who turn in their old cars and purchase cleaner and more fuel efficient cars" (MSNBC, 2009). This legislation developed what is known as the "cash for clunkers" program (see UAW, 2009). This legislation was passed to not only increase the incentive of consumers to purchase newer vehicles, but also to purchase vehicles which are more fuel efficient. It was pushed mainly as an economic stimulus strategy, but it was clearly backed with environmental ideals. According to this plan, if a new vehicle purchased is at least 4 (only 1-2 if a

commercial truck) miles per gallon more efficient than the old one, the consumer will get a \$3500 credit. If the vehicle is 10 or more miles per gallon more efficient the credit is \$4500. This program did become popular throughout the summer of 2009, and may have had some small impact on the fuel efficiency of the US's automobiles, but it was clearly motivated more by the need for increased consumption of GM and Chrysler's cars. Nonetheless, this program is a clear example of how climate change is being used to promote the consumption of greener products, and although it may have actually improved overall fuel efficiency, I am hesitant to agree that any sort of improvement a program like this might make to the atmosphere is more than negligible in the context of climate change. Simply by looking at the almost dismal requirements for improving fuel efficiency (for example one only needed to purchase a work truck of 1 or 2 mile per gallon better to get the \$3500 or \$4500 credit) it was clear that this program was a purely economically motivated one. Although this program was not necessarily intended to be primarily focused on environmentalism, the relevance of explaining it here is that fuel efficiency was used and connected to economic interests through legislation. This signifies, even if only slightly, the influence of climate change on government incentives. But what is even more interesting is how environmental ideas are used to actually promote more consumption, which in itself has detrimental effects on the environment. This program promoted scrapping vehicles as new as models made in 2001. One must ask at this point: do the ecological benefits of purchasing a vehicle with at least four more miles per gallon fuel efficiency outweigh the ecological benefits of stopping the continued production of automobiles? Also, do the benefits of scrapping an old vehicle outweigh the environmental benefits of reducing the large amount of scrap metal and

waste that these vehicles produce? One must ask how much carbon was released into the air to make the new vehicles. Although the newer vehicle will use four less gallons per mile, the cumulative amount of carbon their old car and the new car's production released is probably not negligible. The idea that society must continue to consume and scrap continuously does not seem to have direct and beneficial long term consequences. Although this program was endorsing a sort of environmental interest (reducing emissions), it is doubtful that a program like this has any positive effects on the environment as a whole.

*The Treadmill of Production* (2002), which was written by Allan Schnaiberg, David N. Pellow, and Adam Weinberg explains the environmental consequences of capitalist consumption. They situate the economic system of the West within the context of a treadmill, and describe how primarily since 1945, the economy has changed to endorse economic growth primarily through increased production. In order to continue the increased production, profits needed to be ensured through increased wealth in consumers. Low interest loans became much more common, and unions also developed to ensure the increased wages of employees. This was all achieved in order to increase the profitability of large firms. Schnaiberg et al. (2002) also argue that in any times of economic disparity, the treadmill is used to solve these crises.

This analyses (see chapter 1 for more complete description) are applicable to what is being witnessed in the GM restructuring. Increased production and consumption is being promoted as the primary way towards prosperity, but interestingly ecological concerns with fuel efficiency are also being used to promote this consumption. The irony therefore is that ecological concerns are used to promote mass consumption. Thus,

environmentalism is being used to promote non-environmentalist behaviours. This discrepancy is hard to understand if one looks for ecological motivations to explain it, but economic incentives can effectively solve this apparent paradox. The restructuring of GM, with the use of climate change as a motivation to purchase newer more ‘fuel efficient’ vehicles seems to be used more as a way to convince consumers to help speed up the treadmill again. I argue that this is a clear example of how environmentalism is assimilated to endorse consumerism. The “cash for crappers” program is a clear example of the ‘treadmill of production’ as Schnaiberg et al. (2002) outline. But this program does not show the entirety of the use of climate change to justify consumption. This company has been going through much downsizing, and modernization, and it has been using fuel efficiency relentlessly as a rhetorical strategy to convince consumers to invest in GM’s products.

GM’s entire restructuring plan is embellished with goals of improving the environment, reducing carbon emissions, and helping with global climate change. Advertisements clearly represent these goals through the emphasis of hybrid technology. Take a recent advertisement for the 2008 Chevrolet Tahoe (see GM Hybrid, 2008) for example. This is a transcript of part of the ad:

This is America’s first full size hybrid SUV, the Chevy Tahoe. Up to 50% better city fuel economy than the non-hybrid Tahoe. And is it gigantic!?! (crowd response: “yes!”). Brilliant?! Yes! And can it do jobs teency weency hybrids can’t do? YES! That’s why they make it...  
Chevy, from gas friendly, to gas free. That’s an American Revolution.

Looking more closely at the advertisement, if one reads the small print at the bottom of the screen, it is stated “Tahoe Hybrid 2WD with EPA est. MPG 21 city.” This new fuel efficient “gigantic” SUV boasts an EPA estimated 21 MPG. But the

advertisement instead chose to say it is 50% more fuel efficient than the non-hybrid, rather than simply state its actual rating. This is probably because 21 MPG overall is not by any means a good rating for fuel efficiency for hybrids, especially when considering other hybrids (although much smaller) such as the Toyota Prius which boast EPA estimated 51MPG. Regardless, this ad shows an example of hybrid technology being advertised. Also surprising about this add is the emphasis on how it is a huge, but yet economical the vehicle. But it is advertised as economical only because of its fuel mileage, and this is a good example of how fuel consumption has become strongly connected with climate change. The fuel mileage coupled with its “gigantic” size is marketed here as ideal, and I believe this also reflects the appeal for big consumption, as I had argued in the last chapter. But on a broader scale, this add is also marketing a product which really does not have good fuel efficiency overall. The concluding lines of this advertisement state “Chevy, from gas friendly, to gas free,” but it is hard to picture how they are going to achieve gas free as long as they are producing large SUVs altogether. I find it somewhat of an oxymoronic saying to declare an SUV as gas friendly, as I would be more inclined to think that getting rid of SUVs altogether is gas friendly. Nonetheless, evidence of using hybrid technology to legitimate large vehicles that are still overall fuel inefficient is another illustration of how environmental goals have again become lost within the production and consumption processes. This add here reflects such an irony that I would argue fuel economy is being used clearly as a sort of green approval stamp on products to make consumers feel more secure in purchasing vehicles that still consume large amounts of fuel. So whereas an individual would feel bad about buying a large SUV, they can now comfortably purchase a hybrid SUV with no

worries because they have done their part. But overall even if this vehicle does use less fuel than other SUVs, it still has very poor fuel economy compared to cars which are boasting 50 MPG. Thus if GM is committed to a “gas free” world, one would think that this product would disappear entirely.

However, this advertisement alone does not embody all that GM is doing. As I began to explain in the introduction, GM’s restructuring plan has resulted in many drastic changes to GM. First, GM has committed to narrowing production to ‘four core brands,’ consisting of only: Chevrolet, Buick, Cadillac, and GMC. Production of the brands Pontiac, Hummer, Saturn and Saab have been set to be completely ‘axed’ by 2010. This has resulted in a much more thin company than what GM was before. Along with these cuts, there are clear signs from GM that it is motivated to create energy efficient vehicles. The website for GM Canada states “While a lot is changing at our company today, one thing is not: our commitment to you, our customers. As we eagerly get down to the business of reinventing to build a better company, our dedication to quality and innovation has never been greater. The result will be a leaner, greener and stronger GM Canada. We're reinventing GM Canada” (GM. Can. 2009). But although these statements reflect a strong motivation to modernize and create a leaner company, recent figures have suggested that this company is not out of the woods in terms of debt. After coming out of bankruptcy protection, GM has announced that it has still lost over \$1.2 billion in the last quarter of 2009 (see CTV News, 2009). But GM has announced this loss positively as this loss is substantially less than what it was losing before it filed for chapter 11 bankruptcy.

While this company may be in dire straits in regards to money, this company

markets its dedication to fuel economy, conservation and mitigating climate change more than perhaps any other company at present. GM Canada (2009) has announced its development of the first ever commercial vehicle which can travel 40 miles (65km) without needing the use of any gasoline. GM states that approximately 75% of North Americans drive less than 70km a day, and as a result they claim that this vehicle has the potential to allow 75% of North Americans to drive everyday “without a single drop of gas.” The Chevy Volt is scheduled to be released in 2010, and the orders for this vehicle have exceeded the expected supply at the time of release. This illustrates the strong desire for alternative fuel cars in the modern marketplace, and it further reflects the increased desire of consumers to take part in alleviating climate change. Thus according to J.D. Power and Associates’ findings and GM’s declared sales figures, green cars seem to be gaining appeal. Since climate change has reached such a high level of publicity this potential hazard has sparked these sales trends.

GM’s website (see GM, 2009) is littered with information on fuel efficiency, environmentalism, conservation, climate change, ‘green’ education and so on. All of these pages not only provide consumers information about what the company is doing for the environment, it reflects the very way GM is trying to persuade consumers to purchase their vehicles. It is a way the company is legitimizing itself in the context of climate change. This also reflects the way GM perceives what auto consumers want in a vehicle. Clearly fuel efficiency is a desired attribute in the modern marketplace, and GM is marketing its commitment to achieving these ends at every opportunity. For example, the home page for GM (see GM, 2009) shows three vehicles lined up on a grassy field in front of a multitude of large windmills. This symbolic image captures ecological

modernization in one picture. New vehicles surrounded by alternative energies and lush environments, seems to be an attempt to connect automobiles with environmentalism. The webpage also has a section devoted to technology. In this page GM describes the various forms of efficiency advancements and alternative energies they are researching to use in future vehicles. These include: active fuel management, bio-fuels, electricity, and hydrogen fuel-cells. The company then explains how each of these technological advancements will assist in conserving the environment.

On another page, GM discusses its corporate responsibility:

At GM, our commitment to the environment extends to all aspects of our business - from production practices and the materials we use, to the vehicles we put on the road. With a healthy respect for the environment, we're working to create a fleet of vehicles that can utilize multiple sources of energy – like biofuels, electricity and hydrogen. We're focused on creating more sustainable transportation options for our customers which means greater fuel efficiency and fewer emissions. And it's not just about how our vehicles perform on the road. We're also employing greener manufacturing practices and using recycled and bio-based materials in our vehicles. When our vehicles have reached the end of their useful lives, we've also designed them to be at least 85% recyclable so those parts and materials can go back into new vehicles and other new products. (GM, 2009)

Moreover, GM states its principles for corporate responsibility:

As a responsible corporate citizen, General Motors is dedicated to protecting human health, natural resources and the global environment. This dedication reaches further than compliance with the law to encompass the integration of sound environmental practices into our business decisions. GM's Environmental Principles: We are committed to actions to restore and preserve the environment. We are committed to reducing waste and pollutants, conserving resources, and recycling materials at every stage of the product life cycle. We will continue to participate actively in educating the public regarding environmental conservation. We will continue to pursue vigorously the development and implementation of technologies for minimizing pollutant emissions. We will continue to work with all governmental entities for the development of technically sound and financially responsible environmental laws and regulations. We will continually assess the impact of our plants and products on the environment and the communities in which we live and operate with a goal of continuous improvement (GM, 2009).

These stated responsibilities and principles are meant to be guidelines GM commits to following through its business practices. A stress on pushing for renewable energies, educating the public, and reducing waste seems to be a pretty comprehensive list of responsibilities GM is committing too. Although these may be high goals, and the extents to which GM actually carries out these goals can be suspect, these do reflect a company which is very adamantly marketing its commitment to environmental conservation. The important aspect here is how GM is legitimizing its own viability through its commitment to environmentalism.

GM's 'environmental commitment' is very easy to find in its advertisements and website, and this is a definitive example of a corporation which is endorsing environmental values as a method for achieving economic success. As Schnaiberg et al. (2002) have discussed, environmental regulations and conservation strategies do not run parallel with the goals of a 'treadmill' company. In this context GM is a company which is really primarily interested with increased sales and production. Its commitments to environmentalism may seem quite convincing, and it actually is taking reasonable steps to moderate its impacts on the environment, but it is also quite clear that these corporate responsibilities are also reflecting what they feel the average consumer will respect; and respect is believed to increase sales. GM is trying to increase its reputation on the marketplace. Its poor reputation for fuel efficiency has been argued to be one of the primary reasons why this company has been seeing such financial difficulties of late. Companies like Toyota, which have been increasingly successful, have also been leaders in fuel efficiency. With the Toyota Prius being the top selling fuel efficient car, it is clear that GM is trying to respond to increased demand for cars of this caliber. GM (along

with the other large US automakers) have long been accused of being behind in regard to fuel efficiency, and this renewed commitment to the environment is a technique not only to assist in mitigating climate change, but to ensure GM remains economically viable on the marketplace.

What I find most interesting about this phenomenon is how environmentalism has actually become used by businesses and governments to market certain industries and products to the public. Consumers are convinced that the environment is in danger, and then convinced that purchasing certain products will be effective resolutions to these problems. As the consumer becomes more convinced into purchasing these products new industries, jobs, and products take a larger place in the economy. The establishment of renewable energies, although slow, has been increasing and climate change has made these transitions very favourable in the eyes of government and much of the public. But what are the overall implications for environmentalism? I wish to conclude with a discussion of the long term implications of the popularity of ecological modernization and green consumerism in the context of environmentalism as a whole.

#### CHAPTER 4: THE FUTURE OF ENVIRONMENTALISM IN THE MARKETPLACE:

Through this thesis I have attempted to describe how climate change and environmentalism has assisted in the evolution of international policymaking, environmental regulations, consumer habits, as well as corporate environmental responsibilities. I have tried to tie these evolutions within the concept of green consumerism to show how the marketplace is being used as the primary instrument to solve climate change. But my overall question has been: what is the long term implication of these changes in regards to environmentalism as a whole? As our society

is increasingly focused on consuming its way out of environmental hazards, it is unlikely that we are to ever escape these issues.

The international community has shown large strides in showing at least their interest in resolving climate change. The Earth Summit in Rio, the Kyoto Protocol, the formation of the United Nations Framework Council on Climate Change, and the United Nations Environmental Programme are all clear examples of international and political responses to climate change and other environmental problems. But these organizations have not effectively prevented the continued degradation of the global environment. In reality, large industries have continuously expanded and exploited the environment regardless of any political attempts to regulate. Time and time again leaders from nations over the world meet and conclude that targets have not been met, and that the increased speed of globalization is only making these goals more difficult to meet.

In December 6<sup>th</sup>, 2009 leaders from over 170 nations will meet again in Copenhagen Denmark at the United Nations Conference on Climate Change. Whether any new targets will be made or whether old targets have been met will be decided at this conference, but again, it will be very interesting to see what these leaders conclude with regard to the global status on climate change mitigation. Whatever is found, history has shown that international agreements have been unsuccessful at actually motivating individual states to respond to our crises.

The IPCC's studies continually stress the likelihood that climate change will bring severe changes to our weather as well as the ways we actually carry out our lives. Human settlements, especially those of low income may be devastated by increased rates of hurricanes, tornadoes or rising sea levels. Higher rates of drought in regions around

the equator are expected and consequently the prospect for small scale farmers to lose their livelihoods is likely. These warnings come from studies which although fallible, are agreed upon by many to be quite reliable projections. But with these many warnings, it is increasingly agreed upon that technologies we will need to promote are not affordable to a large majority of developing nations. Modernizing our way to alleviate this hazard will cost tremendous amounts of money, and with many countries already in tremendous debt, the economical viability of investing in renewable energies is not realistic. There is an irony that the international community is promoting strategies to modernize and update technologies around the world, when many nations have neither the money nor the infrastructures to even consider these developments; and this is a problem which will need to be addressed if the market system is to be continuously relied upon to instill change.

Ecological modernization, although it may seem pragmatic at the present time, does not show great potential to assist developing countries. The only way for developing countries to become sustainable is for them to take out more loans by wealthy nations, and this does not bode well for their overall economic prosperity any time soon, and thus may reduce their actual inclination to become environmentally focused altogether. Moreover, there is not much evidence that the world's rich countries are willing to provide such funds that would be necessary. Thus, when looking at sustainability from a primarily economic prospective, there does not seem to be a comprehensive solution. The ecological problem of Climate change is not an environmental hazard with one culprit. Although the developed countries may have had an overall larger contribution to this problem, developing nations also contribute greatly.

This reality means that simply using the market systems to alleviate climate change will not work. There will be a need for wealthy nations to give rather than loan, but in the midst of another global recession, this is probably not likely.

Consumers are also greatly relied upon by governments to assist in these changes. Private sector investors must purchase and stimulate new environmentally benign products to make them more economical in the future. With this market based system, it is apparent that the government is no longer interested nor has the willpower to set stricter regulations on the private sectors. Instead it is relying on the private sector to design and market green products to be more desirable for the consumer to purchase. But the negative implications of allowing technological change to be stimulated by the consumer are that there is no guarantee that the products which become successful are actually environmentally benign. As the case with bottled water showed, consumers are likely to purchase products with terrible environmental consequences out of the fear of environmental hazards. When consumers are marketed other green products such as renewable energies, or hybrid cars with environmental hazards as the catalyst, consumers will not always choose the most environmentally friendly products. They may invest in them with little knowledge of what their benefits actually are. Furthermore, industry is now so reliant on maintaining consumers there is no motivation within the entire economic system to design products which are actually renewable. Consumption is a fundamental need in the present political-economic landscape. And as was shown in Chapter 3, even some renewable energies such as hydroelectric dams are not entirely green, and can be potentially hazardous.

By attempting to achieve environmental targets through the market system, there is an essential reliance on individuals to create change. But this market system approach is concerned primarily with economic prosperity, not ecological conservation, and when environmentalism is introduced into this system, it becomes assimilated. As fuel efficiency becomes equated with lowering carbon, consumers fixate on fuel efficiency rather than climate change. As a result, what began as a solution to climate change becomes instead a new strategy for companies to push consumption: Essentially increasing fuel efficiency by minimal amounts to legitimate creating a renewed market place for 'green' automobiles.

Consumers may invest in certain green products because they value the environment or they are afraid of the consequences of not investing, but the likelihood that this strategy will bring collective change is bleak. As Andrew Szasz (2007) argued, individualism in regards to environmentalism results in people not being politically concerned with environmental activism. Changes to environmental management require collective dissent, and if individual consumer decision making is the strategy relied upon it is unlikely that any fundamental changes will occur. Individualism is actually a cause of the diminutive strength environmentalism actually has politically. If climate change is actually to be tackled, there needs to be more direct action taken against it. Relying on the flexible, yet inconsistent market place to instill these changes will not necessarily result in long term and drastic changes. Environmentalism, when it is used in the market system loses its actual meaning, and becomes commodified like everything else. Environmentalism, in the market place changes sides and betrays itself.

As GM is now reflecting, large corporations are actually using environmentalism to promote consumption. Consumers are relied upon here to purchase green and modernized vehicles, but the overall goal is not environmental conservation, but instead economic progress. This would not be a problem if environmental conservation definitively followed economic progress, but it is not so. And as Neo-Marxists have argued, capitalistic production-consumption processes necessarily exploit the environment. A treadmill of production (see Schnaiberg, 1980; Schnaiberg et al, 2002) only continues to speed up as the modernization process occurs. Production and consumption does not allow genuine environmental goals to be achieved as environmentalism necessarily becomes assimilated by consumerism. Buying and selling towards sustainability, does not allow reliable and predictable improvements, and has historically been disastrous to the environment. As green consumption continues to be the preferred strategy towards achieving environmental targets, it will remain likely that environmental degradation will increase, and at the very least will continue as it is. Consumption necessarily relies on exploitation of the environment, and as long as industries necessarily rely on producing extraordinary amounts of products to maintain themselves there will always be a reliance on consumers to consume. With this system, the logic of producing products which last and which do not eventually have to be thrown away, does not match. A consumer culture promotes exploitation of natural resources, consumption and disposal, and as the treadmill increases in speed to solve climate change, it becomes very unlikely that a few moderately innovative products will solve our problems.

Genuine environmentalism cannot work within a market system, and in order for targets to be met effectively, it will be necessary for governments to begin to set policies which are not simply economically based, and which enforce environmental goals despite potential economic fallouts. The production-consumption logic of our society diverts the consumer from actual issues at hand, and will not result in a global society which is more sustainable. Individuals are separated from the actual problems we face, by being trapped within this economic sphere. If the only way for them to instill change is to purchase their ways out of their problems the environment will be guaranteed exploitation. Fundamental changes to the way we try to solve ecological problems need to be made, and economic interests must not always be attached to these solutions.

We will need to make decisions in the future which are economically bad, but ecologically good. Green products may allow for some slight changes, but the likelihood that consistent and fast pace change will occur is unlikely by relying solely on the consumer. Corporations may be motivated to assist in modernization, but by their necessity to remain economically viable, they must make decisions which are not always ecologically motivated. Thus, in order for long term change to occur, a system which does not rely solely on economic rationality will be needed to ensure ecological sustainability. An ecological rationalism will allow decisions to be made which may be economically bad but environmentally good.

I have tried to show how environmental values become lost in the logic of consumerism, and I have attempted to show how governments and businesses have been using environmentalism to promulgate certain strategies to endorse this. As these organizations use environmentalism, I have found that they use these ideas only in

particular senses which allow other goals to be met. GM's financial difficulties are without doubt the primary issue for that company. But when viewing its websites and by watching its press releases, it is apparent that environmentalism is also high on its agenda. But the disconcerting element is that GM is using environmental values to push consumers into purchasing products which are in fact bad for the environment. As the Cash for Crappers program illustrated, purchasing a new vehicle with almost negligible increases in fuel efficiency provided incentives for people to trash their older vehicles. This was clearly not a program looking to help the environment, but instead to get the treadmill of production going again. Vehicles as new as 2001 were being scrapped for vehicles with only 4 (only 1-2 for commercial trucks) miles per gallon more fuel efficiency. As long as consumers are pushed more and more to "buy new" "scrap old" environmental conservation is not likely. And stamping fuel guzzling vehicles such as the hybrid Chevy Tahoe as fuel efficient only aggravates this situation.

Although much of these arguments are theoretical, I have presented data which I believe supports many of my arguments. But because this is such a large issue, there is much need for future research. Accordingly, more research should be done on the actual global effectiveness of some of these products if they were hypothetically invested in by a large community. Also, studies could be done which monitor the consistency of consumer decision making to get a better idea of how likely large scale change could be if relied on primarily by individuals. I also feel that more research on the actual policies pushed forth by governments should be done, and that this should continue to be done in order to ensure an informed society. As well, more effort could be put into analyzing the influence the oil industry has on this matter, as it is clear that less reliance on

consumption and more reliance on renewability will damage that industry quite extensively.

As this theses argued, the use of consumerism to enable changes in environmental management will not necessarily guarantee the fruition of any comprehensive solutions to our environmental crises. Furthermore, it is primarily the discourses, ideologies and knowledge frameworks of our contemporary society which are creating the continuance of this method for change. I believe that this logic of consumption matched by our desires for self-regulations, individual 'freedoms' and economic prosperity prevents the capability for conservation to be more directly taken. The institutionalization of free-market capitalism and the use of consumerism to instill our desired ends fundamentally prevents ecological goals to be met effectively and predictably. As long as we operate through a linear system of consumption, no matter one's intents, it becomes very unlikely that our environmental problems will be solved before it is too late. But the use of this logic is ultimately a choice as it is inherently a human form of logic. And although thinking outside this logic is not logical, it will be very difficult to create an economy and system which is much more connected and benign to our global ecosystem. However, if those with the interest and dedication to educate and increase the accessibility of alternate forms of thinking about our economy, there is a possibility that long term change could be met. I would recommend the further research of alternate economies, as well as the improvement of education on our environmental hazards. I would also strongly recommend that literature which concisely illustrates the inherent flaws of our current economic systems be brought to the mainstream public so as to give more individuals the opportunity to look at how we solve environmental problems from perspectives which

work outside the logic of consumerism. Hopefully by presenting optimistic and unique ideas on how to alter our economy towards a more sustainable one, the mainstream public will become more interested in seeing this change actually occur.

## REFERENCES

- Aquafina (2009). *How we purify*. Retrieved October 11<sup>th</sup>, 2009 from, <http://www.aquafina.ca/en/default.aspx>
- Baudrillard, J. (1983). *Simulations*. New York: Semiotext
- Baudrillard, J. (1993). The Procession of Simulacra. In J. Natoli and L. Hutcheon (eds.) *A postmodern reader*. 342-375
- Bauman, Z. (2005). *Work consumerism and the new poor*. Open University Press
- Blowers, A. (1997). "Environmental Policy: Ecological Modernization or the Risk Society." *Urban Studies*, Vol. 34, Nos 5-6, pp. 845-871
- Burchell, G. (1991). "Peculiar interests: governing "the system of natural liberty"', in G. Burchell, C. Gordon, and P. Miller, eds, *Foucault and Political Reason*, London: UCL Press
- Busch, W. D. N., S. J. Lary, C. M. Castilone, and R .P. McDonald. (1998). "Distribution and availability of Atlantic coast freshwater habitats for American eel (*Anguilla rostrata*)". *U.S. Fish and Wildlife Service, Administrative Report #98-2*, Amherst, New York.
- Cairncross, F. (1995) *Green Inc.: A Guide to Business and the Environment*. London: Earthscan.
- Christoff, P. (1996). Ecological modernisation, ecological modernities. *Environmental Politics*, 5, 476-500.
- CTV News (2009) GM to Start Repaying Bailout Loans Next Month. Retrieved Nov. 20<sup>th</sup>, 2009 from, [http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20091116/gm\\_3q\\_091116/20091116?s\\_name=Autos](http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20091116/gm_3q_091116/20091116?s_name=Autos)
- Dryzek, J. (2005). *The politics of the earth: environmental discourses*. Oxford University Press
- DeSombre, E. (2006). *Global Environmental Institutions*. Routledge.
- Dickens, P. (2002). "A green marxism? Labor Processes, Alienation, and the division of Labor" in: Peter Dickens, August Gijswijt, Frederick H. Buttel, Riley E. Dunlap. *Sociological theory and the environment. Classical foundations, contemporary insights*, Rowman and Littlefield Publishers Inc, 51-73
- Featherstone, M. (1983). Consumer Culture: An Introduction. *Theory culture & society*.

3(3)

Featherstone, M. (1987). Consumer Culture, Symbolic Power and Universalism, in G. Stauth and S. Zubaida (eds.), *Mass culture, popular culture, and lifeworlds in the middle east*. Frankfurt: Campus Verlag

Featherstone, M. (1991). *Consumer culture & postmodernism*. Sage Publications

Foucault, M. (1977). *Discipline and punish: The birth of the prison*, London: Penguin

Foucault, M. (1993). Excerpts From the History of Sexuality: Volume I: An Introduction. In J. Natoli & L. Hutcheon (p.333-341). State University of New York Press.

Foster, J. B. (2003). "The crisis of the Earth" in Craig R. Humphrey, Tammy L. Lewis, Frederick H. Buttel, *Environment, Energy, and Society: Exemplary works*, Wadsworth, 120-136

Foster, J. B. (1999). "Marx's Theory of Metabolic Rift: Classical Foundations for Environmental Sociology." *American Journal of Sociology*. 105(2), 366-405

Fujikura, R. (2009). Lessons learned from the world commission on dams. *International Environmental Agreements : Politics, Law and Economics*, 9(2), 173-190.

George, S. (1999). "Global Economy: 101". *Conference on Economic Sovereignty in a Globalising World Bangkok*. Retrieved from: w=qg78b4 i3v1,1;k September 6<sup>th</sup>. 2009.

General Motors (GM) Canada, (2009). Retrieved November 6<sup>th</sup>, 2009, from <http://www.gm.ca/gm/english/corporate/reinvention/overview>

GM Hybrid (2008). Video: GM ad for Chevy Tahoe hybrid says other hybrids are "tinsy-winsy". Retrieved November 20<sup>th</sup>, 2009 from, <http://green.autoblog.com/2007/10/22/video-gm-ad-for-chevy-tahoe-hybrid-says-other-hybrids-are-tins/>

Gutman, P. (2003). What Did WSSD Accomplish? An NGO Perspective, *Environment*. 45(2), 22.

Hardin, G. (1968). The Tragedy of the Commons. *Science*. 162, 1243-1248

HMSO (1994) *Sustainable Development: The UK Strategy*. CM 2426. London.

Inter-American Development Bank [IDB] (1997) *Latin America after a Decade of Reforms. Economic and Social Progress 1997 Report* (Washington, DC: Inter-American Development Bank).

International Bottled Water Association (IBWA) (2008). "Confronting challenges: US

and International Bottled Water Developments and Statistics for 2008.” *Bottled water reporter*. Retrieved, October 11<sup>th</sup>, 2009 from, <http://www.bottledwater.org/public/2008%20Market%20Report%20Findings%20reported%20in%20April%202009.pdf>

International Council of Bottled Water Associations (ICBWA) (2003). *Global bottled water statistics*. Retrieved October 11<sup>th</sup>, 2009 from, [http://www.icbwa.org/2000-2003\\_Zenith\\_and\\_Beverage\\_Marketing\\_Stats.pdf](http://www.icbwa.org/2000-2003_Zenith_and_Beverage_Marketing_Stats.pdf)

Intergovernmental Panel on Climate Change (IPCC) (2007a). *Climate Change 2007: Synthesis Report*. Pachauri, R.K. and Reisinger, A. (Eds.). Cambridge University Press.

Intergovernmental Panel on Climate Change (IPCC) (2007b). *Climate Change 2007: Impacts, Adaptation, and Vulnerability*. M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, (Eds.) Cambridge University Press.

Jameson, F. (1984). Postmodernism and the Consumer Society, in H. Foster (ed.) *Post-modern culture*, London: Pluto Press

Jameson, F. (1993). “Excerpts From Postmodernism, or the Cultural Logic of Late Capitalism. In Natoli J. and L. Hutcheon (ed.) *A postmodern reader*. State University of New York Press.

J.D. Power and Associates, (2008). “J.D. Power and Associates Reports: Toyota, General Motors and Honda Capture the Largest Share of Positive Blogger Discussions Regarding Eco-Friendly Automotive Brands. *The McGraw-Hill Companies*. Retrieved October 23<sup>rd</sup>, 2009 from, <http://www.jdpower.com/corporate/news/releases/pdf/2008192.pdf>

J.D. Power and Associates, (2007). “Press Release, J.D. Power and Associates Reports: Hybrid Vehicle Sales on Pace to Reach Record Sales in 2007.” *The McGraw-Hill Companies*. Retrieved October 23<sup>rd</sup>, 2009 from, <http://www.jdpower.com/corporate/news/releases/pdf/2007127.pdf>

Kinney, P.L., J.E. Rosenthal, C. Rosenzweig, C. Hogrefe, W. Solecki, K. Knowlton, C. Small, B. Lynn, K. Civerolo, J.Y. Ku, R. Goldberg, and C. Oliveri. (2006) “Assessing the potential public health impacts of changing climate and land use: the New York climate and health project.” In, *Regional Climate Change and Variability: Impacts and Responses*, eds. M. Ruth, K. Donaghy and P. Kirshen, Eds., Edward Elgar Publishing, Cheltenham, 161-189

Kirshen, P.H., M.R. Ruth and W. Anderson, (2007) “Interdependencies of urban climate change impacts and adaptation strategies: a case study of Metropolitan Boston, USA.” *Climatic Change*, doi: 10.1007/s10584-007-9252-5.

Knowlton, K., J.E. Rosenthal, C. Hogrefe, B. Lynn, S. Gaffin, R. Goldberg, C. Rosenzweig, K. Civerolo, J.-Y. Ku and P.L. Kinney, (2004) “Assessing ozone-related

health impacts under a changing climate.” *Environment, Health Perspectives*, vol. 112, 1557-1563.

Kolpin, D. W., E. Furlong, M. Meyer, E.M. Thurman, S. Zaugg, L. Barber, and H. Buxton. (2002). “Pharmaceuticals, Hormones, and Other Organic Wastewater Contaminants in U.S. Streams, 1999-2000: A National Reconnaissance.” *Environmental Science and Technology*. 36(6), 1202-1211

Kondoh, K. (2009). The challenge of climate change and energy policies for building a sustainable society in japan. *Organization & Environment*, 22(1), 52-74.

MacGregor R., J. Casselman, W. Allen, T. Haxton, J. Dettmers, A. Mathers, S. Lapan, T. Pratt, P. Thompson, M. Stanfield, L. Marcogliese, J. Dutil, (2009). “Natural Heritage, Anthropogenic Impacts, and Biopolitical Issues Related to the Status and Sustainable Management of American Eel: A Retrospective Analysis and Management Perspective at the Population Level.” *American Fisheries Society Symposium*. 69, 713-740.

Miller P., N. Rose, (2008). *Governing the present*. Polity Press.

MSNBC (2009). “Video: Barack Obama’s Speech on GM Bankruptcy.” Retrieved November 20<sup>th</sup>, 2009 from <http://thepoliticalcarnival.blogspot.com/2009/06/video-president-obamas-speech-on-gm.html>

Monck, Ronaldo (2003). Neoliberalism, Necessitarianism, and Alternatives in Latin America: There is no Alternative? (TINA). *Third world quarterly*. 24(3), 495-511

Marie-Monique Robin (2009) The World According to Monsanto, *Mongrel Media*

Mol, A P. (2002). Ecological modernization and the global economy. *Global environmental politics*, 2(2), 92-115.

Mol, A.P. and G. Spaargaren (2002). "Ecological Modernization and the Environmental State". *Research in social problems and public policy*. 10, 33-52

Oberthur S. and T. Gehring, (2005). "Reforming International Environmental Governance: An Institutional Perspective on Proposals for a WEO," in Frank Biermann and Steffen Bauer, eds., *A World Environment Organization*

O'Connor, J. (1994). "Is Sustainable Capitalism Possible?," *Is capitalism sustainable? Political Economy and the Politics of Ecology*, Martin O'Connor, New York: Guilford Press, 152-175.

O'Connor, J. (1998). *Natural Causes: Essays in Ecological Marxism*. The Guilford Press: London/New York

Ontario Green Energy Act (OGEA) (2009a). *Proposal For a Green Energy Act of Ontario*. Retrieved July 12<sup>th</sup>, 2009 from:  
[http://www.greenenergyact.ca/Page.asp?PageID=122&ContentID=962&SiteNodeID=202&BL\\_ExpandID=](http://www.greenenergyact.ca/Page.asp?PageID=122&ContentID=962&SiteNodeID=202&BL_ExpandID=)

Ontario Green Energy Act: Proposed Green Energy Act (2009b). *Ontario Green Energy Act*. Retrieved November 11<sup>th</sup>, 2009, from  
[http://www.greenenergyact.ca/Page.asp?PageID=122&ContentID=962&SiteNodeID=202&BL\\_ExpandID=44](http://www.greenenergyact.ca/Page.asp?PageID=122&ContentID=962&SiteNodeID=202&BL_ExpandID=44)

Rose, N. (1999). *Powers of freedom*. Cambridge University Press.

Rosenzweig, C. and W.D. Solecki, (2001a). "Climate Change and a Global City: The Metropolitan East Coast Regional Assessment." *Columbia Earth Institute*, New York.

Schnaiberg, Allan. 1980. *The Environment: From Surplus to Scarcity*. New York: Oxford University Press.

Schnaiberg, A., D. Pellow, and A. Weinberg, (2002). The Treadmill of Production and the Environmental State, in *Research and social problems and public policy*, 10, 15-32

Sherbinin, A., A. Schiller and A. Pulsiphe, (2006) "The vulnerability of global cities to climate hazards." *Environment and Urbanization*, 12, 93-102.

Solecki, W.D. and C. Rosenzweig, (2007) "Climate change and the city: observations from metropolitan New York." In: *Cities and Environmental Change*, X. Bai, T. Graedel, A. Morishima, Eds., Yale University Press, New York, (in press).

Statistics Canada (2008) Against the flow: Which households drink bottled water? *Envirostats*. 2(2)

Szasz, A. (2007). *Shopping our way to safety: How we changed from protecting the environment to protecting ourselves*. University of Minnesota Press.

The New York Times. 1906. Eels stop an electric light plant. The New York Times (October 26).

UAW (2009). "Save Auto Jobs, Save Main Street." Retrieved November 12<sup>th</sup>, 2009 from  
[http://www.uaw.org/auto/06\\_19\\_09auto1.cfm](http://www.uaw.org/auto/06_19_09auto1.cfm)

UN-Habitat (2003) *The Challenge of Slums: Global Report on Human Settlements* Earthscan Publications, London.

UNISDR, (2004) *Living With Risk: a Global Review of Disaster Risk Reduction Initiatives*.

United Nations, pp. 588. Retrieved August, 5<sup>th</sup>, 2009 from, [http://www.unisdr.org/eng/about\\_isdr/bd-lwr-2004-eng.htm](http://www.unisdr.org/eng/about_isdr/bd-lwr-2004-eng.htm)]

United Nations [UN], (1998). Kyoto Protocol to the United Nations Framework Convention on Climate Change. Retrieved June 2<sup>nd</sup>, 2009 from, <http://unfccc.int/resource/docs/convkp/kpeng.pdf>

United Nations General Assembly (UNGA) (1997). *UN General Assembly Resolution 19/2*, 19 September 1997.

United Nations Framework Convention on Climate Change (UNFCCC) (2009). Retrieved August 20<sup>th</sup>, 2009 from: <http://unfccc.int/2860.php>

U.S. Environmental Protection Agency (U.S. EPA). (2000). *National Water Quality Inventory: 1998 Report to Congress*. Washington: U.S. EPA.

Water Quality Association (WQA) (2001). "Eighty-Six Percent of Americans Have Concerns about Their Home Drinking Water, New WQA Survey Finds," press release, April 23, 2001.

Worm B., Edward B. Barbier, Nicole Beaumont, J. Emmit Duffey, Carl Folke, Benjamin S. Halpern, Jeremy B. C. Jackson, Heike K. Lotze, Fiorenza Micheli, Stephen R. Palumba, Enric Sala, Kimberley A. Selkoe, John J. Stachowicz, Reg Watson, (2006). Impacts of Biodiversity Loss on Ocean Ecosystem Services. *Science*. Vol. 314

## VITA AUCTORIS

Richard MacGregor was born in Kitchener Ontario in 1984. Richard graduated from Paris District High School in 2003, although he attended small Burford District High School until its closure in 2002. From there Richard began his BA in Criminology at the University of Windsor in 2004, graduating in 2008. Richard is now completing his MA in Sociology where he has also presented two papers at the Canadian Sociology and Anthropology Association.