Class Meets:  
Tuesday and Thursday  
12:40 pm – 2:10 pm.  
September 2 – October 9  
Room W2760  
12 sessions  

Course Overview  
Something is clearly different on the environment today. The attention that the environment in general, and climate change in particular, is receiving is nearly impossible to miss. The fact is that we are in the midst of what some are calling the “third wave” of corporate environmentalism. The first wave occurred in the late 1960s, with growing concern for the environment being spurred by events like the Santa Barbara oil spill and the first Earth Day. The second wave occurred in the early 1990s, spurred on by issues and events like Bhopal, the Montreal Protocol, Chernobyl and the Exxon Valdez oil spill. The third wave is being driven by several key issues, but none more powerful than the growing concern over climate change.

Each of these waves lasts for a distinct period of time and subsides. This wave will do the same. However, in the wake of these waves, the business environment is changed in two distinct ways. First, the framing of the problem and the solution are altered. Second, aspects of this alteration take on a permanence that did not exist before the wave. After the first wave, the notion that environmental pollution is a problem led to the formation of the US Environmental Protection Agency and the acceptance that regulation is necessary to protect the environment. After the second wave, the notion that corporations can address some environmental issues as a matter of strategic interest became accepted, particularly as investor groups, insurance companies and consumers began to alter their behavior based on environmental concerns.

How will things be different after the third wave? The goal of this course will be to explore this question from a political, managerial and technological perspective. It is not our intention to make students fully proficient in the structure of environmental law or the scope of global environmental hazards. As needed, class discussions will be augmented to provide necessary background. We will focus instead on the significance of these developments for corporate organization, markets, and operations. We will look at both established industries and emergent companies employing cutting edge technologies, and consider both national and international implications. This class is not aimed at the environmentalist. There is ample reason for critical thinking in an era when political correctness can cloud the logic of rational discourse. What the student should take away from the course is a grasp of the complexity of the environmental issue, its opportunities and limitations for the corporate enterprise. In the final analysis, environmentalism is a fact of the business environment, like it or not. To successfully address this fact, one needs to see that it offers a new lens with which to view taken-for-granted conceptions of basic products and processes.
Some particular questions we will address are:

- Does the so-called "win-win scenario" really exist? Can production efficiency and bottom-line profits be increased through the introduction of new technologies and management systems that are sensitive to environmental considerations?
- How does one evaluate the technical, financial and political aspects of corporate environmental strategy?
- What effects do environmental concerns have on patterns of international trade, marketing, accounting, financial markets, public relations, product development and process design?

**Class Format**

The course will meet twelve times during the fall term. These sessions are divided into two sections. The first deals with the key drivers of corporate environmental management: regulation, international standards and policy, investors, consumers, industry trade groups and natural resource scarcity. The second section considers how these drivers alter the basic "rules of the business environment." The final session will be a wrap-up that considers what we have covered and where the issue may be heading in the future. In class, we will utilize a variety of teaching methods: lectures, case studies, video, in-class exercises, and computer simulations.

**Assignments**

Readings and case preparation *are to be completed before* the class meets. Each session's reading assignments will present a variety of viewpoints. While reading these materials you should continually ask yourself: Do I understand the issue being discussed? Can I frame the issue in the perspective of both the environmental critic and the environmental proponent? How might this affect my decision-making as a manager?

**Position Papers (Individual).** For most sessions, students will compose a one-page position paper on a broad topic related to the evening's readings. The topics are listed at the bottom of each week’s assignment. These papers are meant to challenge you on some fundamental aspects of the environmental issue. Treat them as such. They need not be pro-environment. They must simply present a sound argument taking a stand on the issue. Think of it as something that you might submit to the *Wall Street Journal* or *New York Times* op/ed page. Students can skip seven (out of twelve) papers for the semester without penalty. I strongly suggest that you look at all the paper topics before choosing which, if any, to drop.

**Class Participation (Individual).** The environment is a topic on which everyone has an opinion. It is pervasively covered in the news, movies, TV etc. However, we want to keep the discussion grounded in rational debate and avoid a tendency towards extemporaneous philosophizing in class. Excellent comments possess one or more of the following attributes: (1) they offer an original and relevant perspective on the issue, (2) they move the analysis forward by building on previous contributions or by revealing fresh insights, (3) they transcend the "I feel" syndrome by including evidence that is based on more than personal experience — in other words, your thinking should reflect and integrate examples from other contexts.

**Environmental Business Analysis (Group).** In this assignment you will develop a business plan for a company that will balance environmental protection and business strategy. You must have come to this program or this course with some idea of a company that could satisfy your desire to protect the environment and make a living. What is it? You will form groups of 4 members, pick an industry and develop a proposal that you might present to a bank or venture capitalist to fund. Your plans must be practical and employ existing or emerging technology. The write-up and presentation should be concise and well reasoned with an appropriate amount of research or background information to support the argument. Students are encouraged to be innovative in their
proposals and ideas. But, they should maintain a focus on substance over style in their presentations. Some elements of the proposal might include:

- **Financial Considerations**: What are your financial projections? What are the costs of production? Are there financial benefits from pollution reduction? Will it require retooling or the development of new distribution channels? Such financial projections should be realistic with key data explained and documented.
- **Technical Considerations**: A technical evaluation of the process or technology proposed? Is the proposal, in fact, workable?
- **Social Considerations**: An analysis of the effects of the proposal on the work force. Does it require re-training, work-force increases or reductions, union issues, etc.?
- **Marketing Considerations**: A marketing plan for the product including the target audience for the product and a potential advertising strategy. What is your market? How do you know this will sell?
- **Public Relations Considerations**: An analysis of the potential public relations benefits (and problems) of enacting the new process or developing the product.
- **Environmental Considerations**: What environmental benefits might be created by the proposal?
- **Strategic Considerations**: Who are your competitors? Are you displacing any other products or services already on the market?
- **Other**: A discussion of legal, political or scientific issues which might impact the proposal.

You should plan to cover the environmental and economic aspects of the project per the material presented in the course. Your paper should be properly cited in footnotes at the end of the text. (Please use the style guide at the end of this syllabus.) Your paper should not be more than 15 pages (not including footnotes and up to two attachments), double spaced, 12 point, times roman font with one inch margins.

**Final grade is composed of:**
- Position papers (5) 30% Due **IN CLASS** on the assigned day.
- Class participation 30%
- Final project 40% Due **IN CLASS** on the last day.

**Course Material**
There is a course packet of cases and a required text for this course. This reading should be supplemented by steady reading of contemporary environmental issues as published in *The New York Times, Wall Street Journal, Business Week* etc.

**Required:**
- Reading Packet
**Academic Honor Code:**

Personal integrity and professionalism are fundamental values of the Ross Business School community. This course will be conducted in strict conformity with the Academic Honor Code. The Code and related procedures can be found at [www.bus.umich.edu/Academics/Resources/communityvalues.htm](http://www.bus.umich.edu/Academics/Resources/communityvalues.htm). The site also contains comprehensive information on how to be sure that you have not plagiarized the work of others. Claimed ignorance of the Code and related information appearing on the site will be viewed as irrelevant should a violation take place. Non-Ross Business School students taking the course should also familiarize themselves with the Code as they will be subject to the Code as well while in this course.

**Note to Students with Disabilities:**

If you need an accommodation for a disability, please let me know at your earliest convenience. Some aspects of the course, the assignments, and the in-class activities may be modified to facilitate your participation and progress. As soon as you make me aware of your needs, we can work with the Office of Services for Students with Disabilities to help us determine appropriate accommodations. I will treat information you provide as private and confidential.
### STRAT 564/SNRE 513: Class Schedule

<table>
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<th>Session #1</th>
<th>Introduction: The “Third Wave”</th>
<th>Tuesday, September 2</th>
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<tbody>
<tr>
<td>READINGS:</td>
<td>► CES Preface (pages xv-xvii)</td>
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<td>► CES Chapter 1 (pages 3-26)</td>
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<tr>
<td>DUE:</td>
<td>Complete and hand-in survey in syllabus</td>
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### DRIVERS OF CORPORATE ENVIRONMENTAL STRATEGY

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<th>Session #2</th>
<th>Regulatory Drivers</th>
<th>Thursday, September 4</th>
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<tr>
<td>READINGS:</td>
<td>► CES Chapter 2 (pages 27-51).</td>
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<tr>
<td>CASE:</td>
<td>► <em>Molten Metal Technology (A)</em>, 1999, Boston University Case 99-03A.</td>
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<td>QUESTIONS:</td>
<td>What was the overall business model for MMT: (a) from 1989 to 1995, (b) from 1995 and beyond? Are there any peculiarities about the hazardous waste market that make this start-up company different from other high-tech start-ups? What were the toughest challenges and greatest uncertainties/risks as the company was poised for commercialization at the end of 1995? How well had MMT protected itself from these risks? Looking to the future, if you were Bill Haney, what would you do? If you were Chris Nagel, what would you do? Is this technology an example of a win-win scenario?</td>
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<tr>
<td>POSITION PAPER 2:</td>
<td><em>Is It Immoral to &quot;Buy the Right to Pollute&quot;?</em> (CES 2.1, page 40).</td>
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<th>Session #3</th>
<th>International Drivers</th>
<th>Tuesday, September 9</th>
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<td>READINGS:</td>
<td>► CES Chapter 3 (pages 52-69).</td>
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<td>QUESTIONS:</td>
<td>How and why should companies address the issue of climate change? Does your answer vary by industry? If you believe that climate controls are coming, who would you invest in as “best in class”? Will a climate treaty hurt the US economy; or benefit developing countries?</td>
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<th>Session #4</th>
<th>Resource Drivers</th>
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<td>READINGS:</td>
<td>► CES Chapter 4 (pages 70-84).</td>
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<td>EXERCISE:</td>
<td>► Fishbanks</td>
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<td>QUESTIONS:</td>
<td>Read the simulation’s instructions and come prepared to manage “one of the principal fishing companies in the country.”</td>
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<tr>
<td>POSITION PAPER 4:</td>
<td><em>Can the Market System Protect the Commons?</em> (CES 4.1, page 83).</td>
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Session #5  
**Market Drivers**  
Tuesday, September 16

**READINGS:**  
 ► CES Chapter 5 (pages 85-104).

**CASE:**  

**QUESTIONS:**  
How does the supply chain for FSC certified lumber differ from the supply chain for non-certified lumber? Estimate the full cost to HLC for sourcing and stocking FSC lumber. How does this compare to the full cost for non-certified lumber? How should HLC adapt its operations and supply chain practices to handle FSC? Does the FSC eco-label competitively differentiate HLC in the builder supply market? What are the advantages and disadvantages of horizontal diversification to expand the portfolio of green products offered by HLC beyond FSC? What are options for vertical expansion for HLC? What subset of these options should HSC pursue, and why?

**POSITION PAPER 5:**  
*Is "Green" Marketing Really Greenwashing?* (CES 5.1, page 95).

Session #6  
**Value in Nature**  
Thursday, September 18

**IN-CLASS VIDEO:**  
The Wilderness Idea (57 minutes)

**POSITION PAPER 6:**  

Session #7  
**Social Drivers**  
Tuesday, September 23

**READINGS:**  
 ► CES Chapter 6 (pages 105-126).

**CASE:**  

**QUESTIONS:**  
What’s going on nationally and internationally in wind energy, and in particular offshore wind? What are the costs and benefits of the Cape Wind project? Why has the Alliance been so successful in slowing the project down? What has been the source of Jim Gordon’s success in keeping it going? What should be the role of the State of Massachusetts, and of Washington? How likely is Cape Wind to get built?

**POSITION PAPER 7:**  
*Are There "Limits to Growth" in the World Economy?* (CES 3.2, page 67).

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**CORPORATE ENVIRONMENTAL STRATEGY:**  
THE NEW "RULES OF THE GAME"

Session #8  
**Altering Strategic Objectives**  
Thursday, September 25

**READINGS:**  
 ► CES Chapter 7 (pages 127-159).

**CASE:**  
 ► Living Homes, 2008, Erb Institute Case 08-01.

**QUESTIONS:**  
Would you invest in Steve Glenn’s new company? Would you buy one of his products (assuming you had the capital)? Is there a proper fit between his target market and the product he has to offer? Glenn says he has a six-month window to perfect his business plan. What do you think are his critical challenges in the three legs of his business model? What are the immediate threats and opportunities to his business model? Where should he position the company for long term growth? Is the Living Home model a credible solution to the problems created by the built environment?

**POSITION PAPER 8:**  
*Is Technology the Solution or the Cause of Environmental Problems?* (CES 7.1, page 154).
Session #9  
**Strategy & the Organization**  
Tuesday, September 30

**READINGS:**  
► CES Chapter 8 (pages 160-182).

**CASE 1:**  
► *FedEx and Environmental Defense: Building a Hybrid Delivery Fleet,*  

**QUESTIONS:**  
What do you think of the alliance with FedEx? Is Environmental Defense headed in the right direction? Why would Environmental Defense want to “get in bed with the enemy”? Why would it enter into a partnership with FedEx? Why would FedEx do the same? Can you envision any forms of resistance that the advocates for this partnership might encounter in either organization? Are there dangers to this kind of an alliance; for Environmental Defense; for FedEx? On what basis would you consider this project a success? Could any NGO or any corporation undertake a similar initiative?

**POSITION PAPER 9:**  
*Do the Obstacles to Environmental Strategy Lie on the Organizational or Individual Level?* (CES 8.2, page 177).

Session #10  
**Technological Solutions**  
Thursday, October 2

**IN-CLASS VIDEO:**  
Rachel Carson's *Silent Spring* (56 minutes)

**POSITION PAPER 10:**  
*Do the Solutions to Environmental Problems Lie in Technological or Organizational Innovation?* (CES 8.1, page 161).

Session #11  
**The Institutional Context**  
Tuesday, October 7

**READINGS:**  
► CES Chapter 9 (pages 183-199) and pages 231-236.

**CASE:**  

**QUESTIONS:**  
What’s behind the rise in the environmentally-sensitive segment of the household nondurable goods industry? How does a values-driven strategy add costs to production? Will people pay more for environmentally sensitive products? With the information that you have from the case, what decision would you make with respect to baby wipes? How would you communicate this decision to stakeholders?

**POSITION PAPER 11:**  
*How Do You Change Institutions?* (CES 9.1, page 197).

Session #12  
**Corporate Strategies and Wrap-Up**  
Thursday, October 9

**READINGS:**  
► CES Chapter 10 (pages 203-227).

**CASE:**  
► *Deja Shoe (A),* 1996, World Resources Institute

**QUESTIONS:**  
What is your evaluation of Deja Shoe's environmental business strategy? Who are their competitors? What is their core competence and competitive advantage? Can they sustain it?

**POSITION PAPER 12:**  
This is an *optional* position paper. If your thinking has shifted, you may write another paper on paper topic number 1: *Can Business Management Be Completely Compatible with Environmental Protection?* (CES 1.1, page 25).

**DUE:**  
Final Project
Twenty Questions on Environmental Issues
Hand-In at First Class

1. Which of the following groups do you think has the greatest responsibility for achieving our environmental goals? (a) government, (b) business, (c) community leaders, or (d) individuals.

2. Who do you trust more on environmental issues: (a) the federal government or (b) private business?

3. Do you feel that the Environmental Protection Agency is: (a) very necessary, (b) fairly necessary, (c) just somewhat necessary, or (d) not that necessary?

4. Sometimes there are arguments between people who want to protect their jobs (in industry or in logging for example) and those people who want to protect the environment. In general, do you feel that government policy tends to (a) favor jobs too much, (b) favor the environment too much, or (c) has got the balance about right?

5. Do you feel that the current laws for protecting the environment: (a) place an unfair burden on businesses, (b) balance the needs of businesses and the public, or (c) do not require businesses to do enough to protect the environment?

6. How much progress has been made in dealing with environmental problems in your country since 1970? Would you say we have made: (a) a great deal of progress, (b) only some progress, or (c) hardly any progress at all?

7. Here are two statements which people sometimes make when discussing the environment and economic growth. Which of these statements comes closer to your own point of view? (a) Protection of the environment should be given priority, even at the risk of curbing economic growth, or (b) economic growth should be given priority, even if the environment suffers to some extent.

8. Which of these two statements comes closer to your own views, even if neither is exactly right: (a) my country should do whatever it takes to protect the environment, or (b) my country has gone too far in its efforts to protect the environment.

9. How strongly do you feel about your answer? (a) strongly, or (b) not strongly.

10. Thinking about the overall quality of the environment where you live, that is, the overall health and quality of the air, water, land, and wildlife, would you rate it as: (a) excellent, (b) good, (c) only fair, or (d) poor?

11. All in all, which of the following best describes how you feel about the environmental problems facing the earth? Life on earth will continue without major environmental disruptions only if: (a) we take additional, immediate, and drastic action concerning the environment, (b) we take some additional actions concerning the environment, or (c) we take just the same actions we have been taking on the environment?

12. By the year 2010 do you think that the quality of the environment in your country: (a) will get better, (b) will get worse, or (c) will stay about the same?

13. Which most agrees with your viewpoint? Business can make money protecting the environment (a) always, (b) usually, (c) sometimes, or (d) never.

14. Do you believe that: (a) we are capable of understanding the full complexities of the natural environment so as to manage it to our own purposes. Or, (b) it is so complex as to forever be beyond human comprehension and control?

15. Is the ecosystem: (a) to be protected for its own sake? Or, (b) is it to be protected to enhance the welfare of the human beings who depend upon it?

16. Do you think that market economics and environmental protection are compatible? (a) yes, (b) no, (c) not sure.

17. Do you believe that there are limits to the ability of the earth's ecosystem to sustain human life? (a) yes, (b) no, (c) not sure.

18. Do you consider yourself to be an environmentalist? (a) yes, (b) no.

19. Would you say you are a strong environmentalist? (a) yes, (b) no.

20. Do you belong or contribute to any environmental or conservation groups? (a) yes, (b) no. If yes, how many do you support? 1, 2, 3, 4, 5.
Style Guide for References

Please use endnotes for all references in your papers. The form of entries should fit the following format.

**Book entries** follow this form: Authors’ or Editors’ Last Names, Initials. Year. *Title of book*. (Italic, lowercase except for the first letter of the first word and the first word after a long dash or colon). City Where Published, with abbreviation for state or province (North America) or full name of country, only if needed to identify a small city: Name of Publisher. Examples:


**Periodical entries** follow this form: Authors’ Last Names, Initials. Year. Title of article or paper (in lowercase letters except for the first letter of the first word and the first word after a long dash or colon). *Name of Periodical*, volume number (issue number, *if needed*—see below): page numbers. Examples:


Include an issue number *only* if every issue of the referenced periodical begins with a page numbered 1. (Look at more than one issue to check.)

If an article has no author, the periodical or producing body is referenced:


**Chapters in books** (including annuals) follow this form: Authors’ Last Names, Initials. Year. Title of chapter (in lowercase letters except for the first letter of the first word and first word after a colon). In Editors’ Initials and Last Names (Eds.), *Title of book*: page numbers. City Where Published, State or Country (only if necessary to identify the city): Name of Publisher. Examples:


For *unpublished* papers, dissertations, and papers presented at meetings:


For an *electronic document*, include the author’s name, if known; the full title of the document; the full title of the work it is part of; the ftp, http, or other address; and the date the document was posted or accessed.