

## **Syllabus**

Class Meets:  
Tuesday and Thursday  
10:00 am – 11:30 am  
September 6 – October 13  
Room R1220  
12 sessions

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### **Course Overview**

Over the past 50 years, the notion of corporate environmentalism (later corporate sustainability) was born, grew, and evolved. Though the history of concerns about the state of the natural environment can be traced back more than 300 years, the decade of the 1960s marks the dawn of the “modern” environmental movement. Initially focused on visible forms of air, water, solid and even thermal and aesthetic pollution, attention grew over the next 50 years to include toxic substances, stratospheric ozone, climate change, water scarcity, ecosystem destruction, and species extinction. An even more recent evolution, triggered by the publication of the Brundtland Commission 1987 report on sustainable development, has witnessed a growing concern for income inequality, living wages, fair representation, secure retirement, transparency, and safe working conditions to round out the “triple bottom line” of the sustainability agenda: environment, equity, and economy (profit).

Today, this expanded notion of sustainability has become commonly accepted within both the academy and the corporate sector. Within the academy, what began as a modest offshoot of management science in the early 1990s has grown into a maturing area of study, one that encompasses a wide range of related disciplines. Within business practice, sustainability has entered most domains of corporate activity. Corporations print annual “Sustainability Reports,” insert the term into press releases and CEO speeches, create new positions such as the Chief Sustainability Officer, and gather for conferences on the “sustainability challenge.” A survey by Price Waterhouse Coopers found that 87% of Fortune 1000 CEOs believe sustainability is important to a company’s profits.

To be defined as a profit concern, the sustainability problem has been framed as a continuing shift in stakeholder demands. Pressures from a wide range of institutional constituents (governments, consumers, investors, insurance companies, and others) translate sustainability into frameworks that are familiar and for which ready repertoires are available. For example, as insurance companies apply pressures on the firm, response becomes an issue of risk management. As competitors apply pressure, sustainability becomes an issue of strategic direction and market growth. With investors, it becomes an issue of capital acquisition, and so on.

Over time, sustainability has become less and less an isolated business concern. The firm's business channels have been altered to bring environmental and social issues to managerial attention through avenues related to marketing, accounting, finance, product development, etc. For each case, firms have pre-existing models and language that enable them to understand the issue and formulate a response. As these responses have become routinized, ongoing sustainability issues are treated as ordinary strategic concerns, no longer dictated by external social interests or ecosystem constraints, but rather by internal strategic norms.

This half of a two part course will examine sustainability as a mainstream business issue, one that fits within existing business parameters. Part two will explore the ways in which some of those parameters must shift if we are to fully address the sustainability challenges before us.

### **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.

### **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).** Throughout the course, one-page position papers are assigned to each class related to the evening's readings. The topics are listed at the bottom of each week's assignment. Each student will be assigned two papers to complete over the course of the semester and be prepared to discuss in class (if time permits). 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.

**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.

One formal part of the class participation grade will be leading a case discussion for the first part the class. The class will be divided into small groups and each of you will be assigned the role of discussion leader for one class. You will be required to come fully prepared to guide the group through the process of examining the case study; the critical issues, possible solutions, etc. Then you will report your group's conclusions back to class and defend your positions.

**Futures Scenario (Group).** The business environment is changing. Sustainable development is emerging as a concern within policy and economic circles. But what does it mean? And what will it mean? Your task in this group assignment is to play business futures expert. You will write a **10-15 page** report (appendices, tables and references can be counted above this total) on what you think global businesses will be expected to do in the next 10 years, and the next 50 years, with regards to the environment. What will the environment look like with regards to climate change, water availability, food scarcity, etc? What will the market look like in regards to energy, consumers, buildings, etc? What might the political or economic conditions look like? Try to think of this as a consulting project with yourself as the client; what is your future business environment going to become? Be creative and thoughtful about this, but please try to avoid unrealistic prognostications.

The syllabus provides a future analysis for each session. Additionally, here are some resources that may be helpful:

- Ogilvy, J. and P. Schwartz (2004) Plotting Your Scenarios, [http://www.meadowlark.co/plotting\\_your\\_scenarios.pdf](http://www.meadowlark.co/plotting_your_scenarios.pdf)
- The Economist (2008) "Scenario planning," *The Economist*, September 1, <http://www.economist.com/node/12000755>

Map your write-up along the lines of "Plotting your scenarios;" brainstorm a list of key factors, distinguish the predetermined elements from those that are based on uncertainty (on pages 4 and 5). Use the deductive approach and once you have your 2x2 matrix, flesh out your scenario. Pay attention to the ten tips for successful scenarios. Overall, look at the deeper questions and rethink their assumptions about the future.

Your argument should include specific supporting facts where possible and 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. You should hand-in and be prepared to discuss your analysis in **session #12**.

**Final grade is composed of:**

- Position papers (2) 15% Due **IN CLASS** on the assigned day.
- Class participation 40%
- Futures Scenario 45% Due **IN CLASS** on the last day.

**Course Material**

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

- Required:**
- Hoffman, A. (2000) *Competitive Environmental Strategy*, (Washington DC: Island Press) (CES in the syllabus)
  - 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**

Session #1	<i>Introduction</i>	Tuesday, September 6
<b>READINGS:</b>	<ul style="list-style-type: none"> <li>▶ CES Preface (pages xv-xvii)</li> <li>▶ CES Chapter 1 (pages 3-26)</li> </ul>	

**DRIVERS OF CORPORATE ENVIRONMENTAL STRATEGY**

Session #2	<i>Regulatory Drivers</i>	Thursday, September 8
<b>READINGS:</b>	▶ CES Chapter 2 (pages 27-51).	
<b>CASE:</b>	▶ <i>Molten Metal Technology (A)</i> , 2010, Erb Institute Case 1-429-049.	
<b>QUESTIONS:</b>	▶ 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?	
<b>POSITION PAPER 1:</b>	▶ <i>Can Business Management Be Completely Compatible with Environmental Protection?</i> (CES 1.1, page 25).	
<b>FUTURES:</b>	▶ <i>The Future of the Economy</i> : PWC, <a href="#">The World in 2050</a> .	

Session #3	<i>International Drivers</i>	Tuesday, September 13
<b>READINGS:</b>	▶ CES Chapter 3 (pages 52-69).	
<b>CASE:</b>	▶ <i>"H&amp;M's Global Supply Chain Management Sustainability: Factories and Fast Fashion</i> , 2014, Erb Institute case study 1-429-373	
<b>QUESTIONS:</b>	▶ Corporations have poured billions of dollars into creating CSR teams and conducting social audits since the 1990s, when the sweatshops supplying Nike and Kathie Lee Gifford came to the world's attention. So why are people still dying on their watch? Companies like Walmart	

state that they do not know whether their products were made in a Rana Plaza factory because they contracted out production to their suppliers, who could have further subcontracted out portions of the job. Is this a valid excuse or should Walmart be held responsible for actions that occur throughout its entire supply chain? Does a disaster like this change consumers' future purchasing habits?

- POSITION PAPER 2:** ▶ *Is It Immoral to "Buy the Right to Pollute"?* (CES 2.1, page 40).
- FUTURES:** ▶ *The Future of Energy:* International Energy Agency, [World Energy Outlook 2015](#).

**Session #4** **Technology Drivers** **Thursday, September 15**

- READINGS:**
- ▶ ["Mitsubishi admits cheating on fuel-economy tests,"](#) *New York Times*, April 20, 2016.
  - ▶ ["Beyond VW scandal: Home appliance industry no stranger to tricks,"](#) *New York Times*, October 9, 2015
  - ▶ Gelles, D. (2015) ["Social responsibility that rubs right off,"](#) *New York Times*, October 17
  - ▶ Slides from Erb Institute Webinar with Tom Catania, *No Right Way to do a Wrong Thing*. [On Course Canvas page](#)

**CASE:** ▶ *Volkswagen's Clean Diesel Dilemma*, 2016, Erb Institute Case 1-430-484

**QUESTIONS:**

- ▶ Was there anything about the culture at VW that could have contributed to the implementation of a defeat device? Was there an effective CSR program in place to catch this violation? How did VW approach market competition considering the methods of other diesel manufacturers? How did VW's business model match its sustainability strategy? What role did environmental and social responsibility play in VW's decision-making? How does government play a role in business and the environment? Should governments regulate companies in order to protect the environment? Even if it may stifle economic growth? What have companies besides VW done in order to incorporate environmental and social outcomes in their business strategies? If health concerns and deaths could be linked to nitrous oxide (NOx) emissions, should criminal charges be brought against the company? How far up in the organizational hierarchy should prosecution go? Were VW's sustainability initiatives an example of green-washing? How could the VW emissions scandal affect the market for clean fuel technologies? What does VW have to do to regain its reputation? What should the incoming CEO do internally to ensure something like this never happens again?

**GUEST:**

- **Tom Catania**  
[Executive-in-Residence at the Erb Institute](#)  
[Former VP of Government Relations at Whirlpool](#)

**POSITION PAPER 3:** *Why Not Skip All the Complicated Compliance Schemes and Simply Ban Dangerous Chemicals?* (CES 2.2, page 45).

**FUTURES:** ▶ *The Future of the Corporation and the Job Market:* Jerry Davis, [Capital Markets and Job Creation in the 21<sup>st</sup> Century](#), Brookings Institution, 2015.

Session #5	Resources Drivers	Tuesday, September 20
READINGS:	▶ CES Chapter 4 (pages 70-84).	
CASE:	▶ <i>Travelers Insurance: Focusing on Climate Change and Natural Catastrophe Risk</i> , 2013, Erb Institute Case 1-429-347.	
QUESTIONS:	▶ Is there a business case to be made to take action on climate change? What strategies should Evan recommend based on the particular business case? Should Travelers revise its catastrophe models to account for more extreme weather events? Could these adjustments make the company into a better underwriter, or will they cause the company to price itself out of the certain markets? Should the company change its policies to reflect the increasing likelihood of these events? Should it withdraw from specific regions, choose not to renew existing policies, or raise premiums for existing customers with high-risk exposure? Should it purchase more weather derivatives from reinsurance companies as a hedge against climate risk? Should it find a way to turn the massive volume of climate data available through agencies like the National Climatic Data Center into practical actuarial and business data? Or, would it be wiser to wait for third-party contractors to develop this data into useable business models?	
POSITION PAPER 4:	▶ <i>Are There "Limits to Growth" in the World Economy?</i> (CES 3.2, page 67).	
FUTURES:	▶ <i>The Future of the Climate: US Global Change Research Program</i> , <a href="#">Global Climate Change Impacts in the United States</a> .	

Session #6	Market Drivers	Thursday, September 22
READINGS:	▶ CES Chapter 5 (pages 85-104).	
CASE:	▶ <i>Living Homes</i> , 2008, Erb Institute Case 1-428-714.	
QUESTIONS:	▶ Would you invest in Steve Glenn's 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 5:	▶ <i>Is "Green" Marketing Really Greenwashing?</i> (CES 5.1, page 95).	
FUTURES:	▶ <i>The Future of the Buildings: Accenture</i> , <a href="#">Analytics and Smart Building Solutions</a>	

Session #7	Social Drivers	Tuesday, September 27
READINGS:	▶ CES Chapter 6 (pages 105-125).	
CASE:	▶ <i>Coke in the Cross Hairs: Water, India and the University of Michigan</i> , 2010, Erb Institute Case 1-429-098.	
QUESTIONS:	▶ Why should Coke even pay attention to the issues raised at the University of Michigan? How do you, as a corporate executive, know when to attend to some social issues and not others? Does this one have merit? On what grounds? Did Amy Landau really fail in her efforts to address water issues in India? How do the four characters in the case fit together? Are their goals in opposition? Are their tactics in	

opposition? Is the outcome a good one? *More personally, where do you stand on the green continuum? There is no longer such thing a single green movement. There are shades of green, and the lines of the movement blur into the corporate sector. Are you a 'bright green' – believe that corporations are the solution -- or "dark green" – believe that corporations are the problem? Where will you most fit, given your interest in promoting sustainability? Is one right and one wrong?*

- POSITION PAPER 6:** ► *How Far Should Free Trade Go with Respect to the Environment?* (CES 3.1, page 53).
- FUTURES:** ► *The Future of Water:* World Resources Institute [Water Aqueduct Project](#)

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

**Session #8** **Thursday, September 29**  
***Altering Strategic Objectives***

- READINGS:** ► CES Chapter 7 (pages 127-159).
- CASE:** ► *The Clorox Company Goes Green*, 2010, Erb Institute Case 1-428-989.
- QUESTIONS:** ► The Clorox Company launched green household cleaning products line GreenWorks in 2008 and immediately commanded 40% of the market. Following stagnant sales in the early 2000s due to fierce competition with Procter and Gamble, Unilever and others, the company made a bold move into the green consumer market with the launch of GreenWorks, acquisition of Burt's Bees natural personal care products, and a strategic partnership with the Sierra Club. Where should Clorox go from here? Can Clorox leverage the success of GreenWorks in other areas? If so, how? Should Clorox switch strategies from fast follower to first mover? If so, how will this affect potential new "green" products?
- POSITION PAPER 7:** ► *Is Technology the Solution or the Cause of Environmental Problems?* (CES 7.1, page 154).
- FUTURES:** ► *The Future of the Consumer:* Deloitte, [Consumer 2020](#),

**Session #9** **Tuesday, October 4**  
***Strategy & the Organization***

- READINGS:** ► CES Chapter 8 (pages 160-182).  
► ["Climate science as culture war,"](#) *Stanford Social Innovation Review*, Fall 2012.
- POSITION PAPER 8:** *Do the Solutions to Environmental Problems Lie in Technological or Organizational Innovation?* (CES 8.1, page 161).
- FUTURES:** ► *The Future of the Energy Markets:* Alliance to Save Energy, [Energy 2030 Recommendations](#)

**Session #10** **Thursday, October 6**  
***The Institutional Context***

- READINGS:** ► CES Chapter 9 (pages 183-199).  
► ["How driverless vehicles will redefine mobility and change car culture,"](#) *The Conversation*, February 24, 2016 – Read the article and the comments; [add a comment to the discussion](#)
- CASE:** ► *Blueprint for Ford's Future: From Personal Automobiles to Mobility*, 2013, Erb Institute Case 1-429-303

**QUESTIONS:**

- ▶ Is Ford headed in the right direction? Can Ford make the transition from being a car manufacturer to a provider of mobility services? If so, should the company make this transition? What are the key drivers behind this shift? How should the company be positioned for long-term growth? What is Ford's value proposition within the context of the new mobility market? What are the toughest challenges and greatest uncertainties/risks Ford is facing? How well has Ford protected itself from these risks? What are the critical challenges in the Ford business model as outlined in the "Blueprint for Mobility"? What are the immediate threats and opportunities to this business model? What is the role of partnerships and nontraditional stakeholders in Ford's vision of the future? Does this exemplify a new model of business management? What are the pros and cons of the Zipcar partnership to each company? If you were a developing country or a burgeoning megacity, would you look to partner with Ford? What are the unique benefits/drawbacks Ford brings to the partnership (compared to other automotive companies/firms in other industries)? Can you envision any forms of resistance that the advocates for these partnerships might encounter in Ford? How can Ford be a leader in resource-efficient, sustainable transportation and still be the company that sells SUVs like the Explorer? How should Ford market these products? How can Ford convince customers and potential partners about its seriousness in entering the mobility market? Looking to the future, if you were David Berdish, what would you do? If you were Bill Ford Jr.?

**POSITION PAPER 9:**

*How Do You Change Institutions?* (CES 9.1, page 197).

**FUTURES:**

- ▶ *The Future of the Automobile*: "Special issue: The future of cars," *The Economist*, (1) [Gloom and Boom](#) (2) [Clean, Safe and it Drives Itself](#)

**Session #11*****Climate Change Strategy*****Tuesday, October 11****READINGS:**

- ▶ "[Climate change strategy: The business logic behind voluntary greenhouse gas reductions](#)," *California Management Review*

**CASE:**

- ▶ *Google Energy's Shift into Renewables*, 2012, Erb Institute Case 1-429-226.

**QUESTIONS:**

- ▶ How should a large company approach movement into a new sector? With a brand as powerful as Google's, can you rely on the power of brand recognition for success or should you be more cautious and avoid damaging your brand when trying to diversify into new markets? Would the failure of a company that Google has invested in hurt its brand? Would Google's investments be more likely to succeed if they integrated companies and placed them under the Google name? Was releasing energy consumption and emissions data a strategically optimal decision? Why or why not? Will Google be able to achieve its sustainability objectives given its projected growth? What are the consequences of failing to do so? Should Google invest more in companies it already has a stake in or broaden its investments to include more companies?

**POSITION PAPER 10:**

*Is There Inherent Value in Nature?* (CES 6.1, page 124).



<b>DUE:</b>	▶ Individual Assignment: Future's Scenario Analysis
<b>QUESTIONS:</b>	▶ Be prepared to discuss your individual assignment regarding the present and future expectations on business regarding the environment.

### 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:

Granovetter, M.S. 1965. *Getting a job: A study of contracts and careers*. Chicago: University of Chicago Press.

Kahn, R. L., & Boulding, E. (Eds.). 1964. *Power and conflict in organizations*. Glencoe, IL: Free Press.

R. Harbridge (Ed.) *Employment contracts: New Zealand experiences*. Wellington, New Zealand: Victoria University Press.

National Center for Education Statistics. 1992. *Digest of education statistics*. Washington DC: National Center for Education Statistics.

*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:

Shrivastava, P. 1995. The role of corporations in achieving ecological sustainability. *Academy of Management Review*, 20: 936-960.

Nonaka, I. 1991. The knowledge-creating company. *Harvard Business Review*, 69(6): 96-104.

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:

*BusinessWeek*. 1998. The best B-schools. October 19: 86-94

*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:

Dutton, J., Bartunek, J., & Gersick, C. 1996. Growing a personal, professional collaboration. In P. Frost & S. Taylor (Eds.), *Rhythms of academic life*: 239-248. Newbury Park, CA: Sage.

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

Duncan, R. G. 1971. *Multiple decision-making structures in adapting to environmental uncertainty*. Working paper no. 54-71, Northwestern University Graduate School of Management, Evanston, IL.

Smith, M. H. 1980. *A multidimensional approach to individual differences in empathy*. Unpublished doctoral dissertation, University of Texas, Austin.

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.