

Management 246A
Business and the Environment

Winter Quarter 2018

| | |
|---------------------------|--|
| COURSE HOURS | Wednesdays: 4:10-7:00pm in Gold Hall, Room B-301 |
| COURSE URL | https://ccle.ucla.edu/course/view/18W-MGMT246A-1 |
| INSTRUCTOR | Professor Magali (Maggie) Delmas Gold Hall, B-504 Phone: (310) 825-9310 E-mail: delmas@ucla.edu https://twitter.com/@maggiedelmas |
| OFFICE HOURS | Wednesday: 12:00pm-2:00pm or by appointment |
| TEACHING ASSISTANT | Paloma Giottonini E-mail: mpgiotto@ucla.edu |

COURSE DESCRIPTION

Today, we are faced with important environmental problems: climate change, the destruction of natural habitats and the continuing loss of species, degradation of our water, soil and air...Businesses are playing a major role in contributing to these environmental problems, at the same time businesses can play a major role in attempting to create a sustainable planet earth.

This course considers major questions about the role of business in mitigating environmental degradation. We will put emphasis on corporate strategies that deliver value to shareholders while responding to environmental concerns. For example, some firms successfully adopt environmental differentiation strategies to respond to customers environmental concerns; other firms use environmental concerns as a way to generate costs savings within the business; yet other firms seek to influence government regulation in order to impose their standard on competition. We will examine environmental issues in each of the main areas of the MBA program: finance, marketing, operations, supply-chain management, accounting, entrepreneurship and strategy.

Through a combination of cases, readings, lectures, videos and simulations, class sessions will engage students in discussions of management tools that incorporate principles of environmental management and corporate performance. A group project is a major component of the course.

| |
|------------------------|
| COURSE OVERVIEW |
|------------------------|

| SESSION | DATE | TOPIC |
|---------|-------------|---|
| 1 | January 10 | Introduction To The Course <ul style="list-style-type: none"> Fishbanks Simulation Game Tragedy of the Commons |
| 2 | January 17 | Environmental Regulation And Strategy <ul style="list-style-type: none"> Climate Change Emission Trading Markets |
| 3 | January 24 | Environment and Finance <ul style="list-style-type: none"> Does It Pay To Be Green? [Case] Socially Responsible Investing: Data-Driven Decision Making How To Measure Environmental Performance |
| 4 | January 31 | Environment and Accounting: Sustainable Reporting <ul style="list-style-type: none"> Global Reporting Initiative Carbon Disclosure Project B Corporation |
| 5 | February 7 | Environment, Operations and Life Cycle Analysis <ul style="list-style-type: none"> Life Cycle Assessment For Greener Products [Case] Alpha Motors Energy Efficiency in the commercial sector |
| 6 | February 14 | Environment, Operations and Supply Chain Management <ul style="list-style-type: none"> Green Supply Chain Management [Case] Walmart |
| 7 | February 21 | Environmental Marketing <ul style="list-style-type: none"> Environment As A Basis For Differentiation [Case] Tesla Motors |
| 8 | February 28 | Environment Communication, Ethics and Organizational Behavior <ul style="list-style-type: none"> The Risks Of Greenwashing [Case] Lululemon Employee engagement |
| 9 | March 7 | Environment, technology and entrepreneurship <ul style="list-style-type: none"> Information Technologies and Energy Conservation Start-up Simulation |
| 10 | March 14 | Project Presentations |

READINGS

The required materials for the course are available online either through the UCLA Library or posted on the class website. To access them, you will need to have [properly configured proxy browser](#) settings and/or use the [UCLA VPN](#).

For your convenience, I have provided links to the readings in this syllabus. Each week make sure you read the required material. I strongly recommend that you start downloading the readings well ahead of time; coming to class unprepared "because I couldn't access the readings" is not an acceptable excuse.

Suggested Background Reading:

Magali Delmas with David Colgan. *The Green Bundle: Pairing the Market with the Planet*. Stanford University Press. 2018. 304 pages. [\[Link\]](#) Manuscript available on CCLE.

GRADING

There will be no final exam. The final grade will be determined as follows.

| | | |
|---------------------------------------|-----|----------------------------|
| Class Participation | 20% | |
| Group Presentation & Group Assignment | 20% | (3 Group assignments) |
| Individual Assignments | 30% | (2 Individual assignments) |
| Group Project | 30% | (Report and presentation) |

Grading will follow, to the extent possible and reasonable, the suggested distribution of grades for MBA elective courses.

| | |
|-------------|-------------------------------|
| A+, A, A- | No more than 50% of the class |
| B+ or below | At least 50% of the class |

Class Participation

This course will be heavily discussion-based, as is inevitable given the nature of the topic. As a result, you should be well prepared to participate in these discussions. This means reading the materials for that session, thinking about them and being creative and entrepreneurial in finding and digesting other relevant material from whatever sources you like to use. Based on feedback from past students, I will frequently cold call during the course, but as a rule you should be proactive in participating and not wait to be cold called. You will also receive considerably more participation brownie points for disagreeing with a previous comment than by saying "I agree with everything that's been said so far and just want to add one small point..." Class participation applies also to sessions that have guest speakers.

Attendance is mandatory. One absence is permissible for good cause; additional absences will adversely affect your grade regardless of the cause for those absences. Repeated absences will lead to a failing grade. If for any reason you will miss class or will be late for class, send me an e-mail (delmas@ucla.edu cc mpgiotto@ucla.edu) before class explaining the absence or tardiness. If you know in advance that you will miss a class, we will consider a written analysis of the missed day's case when assigning the final course class participation grade, if it is submitted to me before the missed class. Such written work will mitigate, but not eliminate the adverse effects on your classroom performance grade of missing class. If the absence is unanticipated, send me e-mail

explaining the absence within 72 hours of the absence. Because entering or leaving the classroom during class is disruptive to the learning environment, your fellow classmates and I expect that you will not do so, except in an emergency.

Group Presentation (Or "Mini-Briefing")

Most sessions will include a brief presentation by a group of students on either the case study or a class assignment. The presentation should be absolutely no more than 10 minutes.

Individual Assignments

The two individual write-ups are due in weeks 4 and 7. The assignments are described in the course outline. Be concise and precise. I look for quality of reasoning and logical consistency, not work based on "stream of consciousness." Use 12-point font, single spaced. Individual assignments should be performed entirely individually; you may only discuss your work with others after submitting it. Always cite your sources carefully; see for instance <http://guides.library.ucla.edu/citing/plagiarism/avoid> for detailed guidelines on how to cite correctly. Also see [UCLA Academic Integrity](#) or the [UCLA Anderson Student Honor Code](#) for more information on academic conduct. All work should be submitted electronically through the course website. I will use Turnitin.com to verify originality.

Individual Assignment 1 Due date Monday, February 5, before 10:00pm (Week 5)

According to you, what are the main screening challenges associated with Socially Responsible Investing and what should be the principles of a good screening methodology? Please use the suggested readings as well as your ranking of the chemical companies to build your argument (two pages maximum).

Individual Assignment 2 Due date Monday, March 5, before 10:00pm (Week 9)

Assume you work for a company that is considering applying the Green Bundle strategy. Pick any company and product you wish, and write a detailed proposal (2 page maximum) to your CEO outlining how you would implement the Green Bundle strategy. Describe how the company could use one of the five distinct paths to promote personal advantages while remaining sustainable, using benefits that often come naturally with environmental goods: quality, status, health, money, and emotion. Describe the feasibility of the Green Bundle Strategy and the steps of its implementation. Explain whether you would choose a vocal or silent Green Bundle communication strategy. Upload a word document to the course website before class.

Group Assignments

There are 3 group assignments for which every group submits a Powerpoint presentation.

1. Session 2 presentation of Cap & Trade program
2. Session 3 presentation of ranking of 13 firms based on environmental performance
3. Session 4 presentation of ranking of 13 firms based on environmental disclosure

Group Project

Each group (of four to five members) will produce a final report analyzing the link between the business strategy and the corporate strategy of a firm of your choice. Imagine that a company has hired you as a consultant and that you need to provide recommendations to the CEO on how to adopt a "successful environmental strategy." It is expected that you will send your final report to the company of your choice and that this report will help them improve their environmental strategy.

The environmental corporate strategy can encompass compliance strategies, Green Bundle strategy, adoption of eco-labels, or disclosure of environmental performance. The final product should consist of a report that responds to the following questions for the company you have selected.

1. What type of corporate environmental strategy is the company pursuing? Describe the strategy from the perspectives that we have used in the course. Characterize environmental management practices as well as environmental performance. Evaluate a) the strengths and liabilities of the strategy given the firm's current and prospective operating environment and b) how successfully you believe the firm has been at implementing its chosen environmental strategy.
2. How could this company improve its environmental performance while improving its bottom line? For example, could this company offer environmental products or services? Would there be a market for these products or services? Prepare a list of one or perhaps more recommended strategic changes and a plan to implement them.

The final product should be more than simply a paper; it should be an "object of persuasion" that includes analysis, text, figures, illustrations, flowcharts, whatever you believe would be necessary to convince the board of directors that your strategy is the right path to follow. You will need to get information (i) from publicly available databases such as the U.S. EPA Toxic Release Inventory (ii) from the company through interviews and (iii) as much as possible from consumers, suppliers, distributors, etc.

The report should have a table of contents, as well as a bibliography with references and be no longer than 10 pages excluding pictures and tables (12 point font, double spaced with 1 inch margins).

Project Due Dates and Presentations

A few weeks into the course we will briefly evaluate your progress on the final project. We will ask you to submit a one-page overview of your final project on Friday, January 19, 2018 before 10:00pm uploaded on the class website (12-point font, single spaced with 1 inch margins). The overview should identify the name of the author(s) of the project and the company that you will study. It should also include a short description of your project, list the information sources you will use to prepare your report, and the name of your contact at the company of your choice. It is particularly important that you have established direct contact with the company by that time.

Due date for the final report is Tuesday, March 13, 2018 before 10:00pm by e-mail; no late assignments will be accepted. Each group will also submit a short blog (300 to 500 words) about their project before Tuesday, March 13, 2018 @ 10:00pm that will be used to stimulate class discussion during the last session. If the company requests confidentiality, the name of the company can be disguised. The last session of the course will be devoted to project presentations. In grading the group projects, I will solicit peer evaluations from all group members, and will assign individual grades based on your relative contribution to the group's work.

Blog

Throughout the quarter, students are encouraged to blog or post comments on the class blog <http://envUCLA.blogspot.com>, which is open to the public and to tweet their blog posts. Please tag @maggiedelmas in your tweets so we can retweet.

| Session | Date | Class title | Assignments |
|---------|-------------|---|--|
| 1. | January 10 | Introduction to the course | Please read assigned articles and syllabus before class. Fishbanks simulation (at Computer Lab) Watch the instructional video before class |
| 2. | January 17 | Environmental Regulation and Strategy | Group Assignment 1 due Tuesday, January 16. Upload to CCLE before 10:00pm 4 group presentations |
| | | Final Project overview (1-page) | Due Friday, January 19 by 10:00pm. Upload to CCLE Session 3 |
| 3. | January 24 | Environment and Finance | Group Assignment 2 due Tuesday, January 23. Upload to CCLE before 10:00pm 2 group presentations |
| 4. | January 31 | Environment and Accounting: Environmental Reporting | Group Assignment 3 due Tuesday, January 30. Upload to CCLE before 10:00pm 2 group presentations |
| | | Individual Assignment 1 | Due Monday, February 5 by 10:00pm. Upload to CCLE, Week 5 |
| 5. | February 7 | Environment, Operations and Life Cycle Analysis | Case Study: Alpha Motors 1 group presentation |
| 6. | February 14 | Environment, Operations and Supply Chain Management | Case Study: Wal-Mart 1 group presentation |
| 7. | February 21 | Environmental Marketing | Case Study: Tesla Motors 1 group presentation |
| 8. | February 28 | Environmental Communication, Ethics and Organizational Behavior | Case Study: Lululemon 1 group presentation |
| | | Individual Assignment 2 | Due Monday, March 5 before 10:00pm. Upload to CCLE, Week 9 |
| 9. | March 7 | Environment, Technology and Entrepreneurship | Clean Start Simulation (at Computer Lab). Watch the instructional video before class |
| | March 13 | FINAL REPORT AND ONE PAGE ARTICLE | DUE Tuesday, March 13 by 10:00 PM |
| 10. | March 14 | Final Project Presentations | 2-3 group presentations Peer evaluations due before Midnight on March 14. Upload to CCLE |

COURSE OUTLINE

Session 1

Introduction to the Course

This session will serve as an introduction to the course. In the first part of the class, we will discuss the concept of the "Tragedy of the Commons" and the economic rationale for beyond compliance behavior. In the second part of the class, you will play the simulation game.

Exercise

You will play a simulation game called "FishBanks." The FishBanks game was developed by Dr. Dennis Meadows. This game will allow you to experience managing your own fishing company and competing with other fishing companies in an attempt to maximize your profit.

The game allows participants to experience many of the decisions and problems that "real life" fishing companies must face. Like real business executives, the teams of students need to seek out and make strategic use of available information. A computer program calculates all their financial transactions and tracks the status of the fish population based on fish catches, births and deaths. The company managers must contend with ecological, economic and psychological forces. The object of the game is to maximize your assets at the end of the game, which is at the end of 10 rounds.

Watch the instructional [video](#) before class.

Readings

- "Does It Pay to Be Green? A Systematic Overview." Ambec and Lanoie. *The Academy of Management Perspectives*. 22(4): 45-62. 2008. [\[link\]](#)
- "The Tragedy of the Commons." Garrett Hardin. *Science* 162: 1243-1248. 1968. [\[Link\]](#)
- The Tragedy of the High Seas. *The Economist* Feb 2014 [\[Link\]](#)
- Video Elinor Ostrom Nobel Prize [\[Link\]](#)

Session 2

Environmental Regulation; Environment and Strategy

In this class, we will discuss the different voluntary and regulatory approaches available to mitigate climate change. We will focus on emissions trading, an economic policy instrument used to control emissions by providing economic incentives for achieving emission reductions.

Group Assignment 1

Each group prepares a 5 minute PowerPoint presentation of one of the following cap and trade programs of your choice (presentation submitted on class website before class):

- U.S. Acid Rain Program [\[Link\]](#)
- E.U. Emission Trading System [\[Link\]](#), [\[Link\]](#)
- South Coast Air Quality Management District, Reclaim Program [\[Link\]](#)
- California Cap and Trade [\[Link\]](#)

This presentation must include the following information: short history of the creation of the program, number of participants, describe how the program works including the initial allocation mechanism for credits/permits, and the price fluctuation of the credits/permits. Is the program effective?

Readings

- Firms' choice of Regulatory Instruments to Reduce Pollution: A Transaction cost approach. Delmas M and A. Marcus *Business and Politics*. 2004 [\[Link\]](#)
- Video: Cap and trade Annie Leonard [\[Link\]](#)
- Cap and Trade. Center for Climate and Energy Solutions. 2001[[link](#)]

In Class Discussion

How do trading permit systems work? What are the challenges associated with AB32? Do voluntary initiatives work?

Session 3**Environment and Finance**

In this session, you will get familiarized with publicly available U.S. databases on environmental performance. We will discuss the relationship between environmental and financial performance and survey the principles and objectives of Socially Responsible Investing.

[Case] Socially Responsible Investing: Data-Driven Decision Making

This case examines 13 publicly traded chemical companies in order to understand the various measures and dimensions of corporate environmental performance used by Socially Responsible Investors. Students are presented with real-world data on corporate environmental performance (including pollutants released and third-party corporate social responsibility ratings) and asked to incorporate environmental and social performance into investing decisions. This case highlights the challenges of evaluating corporate environmental performance.

Group Assignment 2

Evaluate the environmental performance of the 13 firms in the case using data from MSCI [\[Link\]](#) and the EPA Toxic Release Inventory [\[Link\]](#) provided on the class website. Describe the criteria you choose and why. Before class, each group must upload a five-slide PowerPoint presentation of your findings and an Excel spreadsheet with your ranking on the class website.

Readings

- Familiarize yourself with the Toxic Release Inventory (TRI) data by looking at the EPA TRI website [\[Link\]](#) and UCLA Cal EcoMaps [\[Link\]](#)
- "Triangulating Environmental Performance: What do Corporate Social Responsibility Ratings Really Capture?" Delmas, M., Etzion, D., & Nairn-Birch, N. *Academy of Management Perspectives*. 2013 [\[Link\]](#). See Corporate Knights article in CCLE.
- "Measuring corporate environmental performance: the trade-offs of ratings." Delmas, M, and Vered Doctori Blass, V. *Business Strategy and the Environment* 19, no. 4 (2010): 245-260 [\[Link\]](#).
- "Measuring Corporate Social Performance: An Efficiency Perspective." Chen and Delmas. *Production and Operations Management*. 2013. [\[Link\]](#)

Session 4**Environment and Accounting: Environmental Reporting**

In this session, we will discuss the principles of environmental accountability.

We will discuss the Carbon Disclosure Project [\[Link\]](#), a non-profit based in the United Kingdom that works with institutional investors to promote greater transparency in climate change and other environmental

issues. The CDP asks companies for data on their environmental performance in climate change, supply chain, water, and forests. We will also discuss integrated reporting initiatives.

Group Assignment 3

Use the CDP and Lobbying data from the companies provided on the class website.

- Which companies would you invest in? Describe the criteria you choose and why.
- Please compare your rating of firm's climate change performance to your previous rating based on KLD and TRI. How do these differ? Which data you think is the most valuable for investment purposes?

The day before class, submit a five-slide PowerPoint presentation of your findings and the Excel spreadsheet that contains your data analysis.

Readings

- CDP questionnaire [\[Link\]](#)
- Corporate Sustainability or Greenwashing? Delmas, M. *Huffington Post* 2014 [\[Link\]](#)
- Dynamics of environmental and financial performance: The case of greenhouse gas emissions. Delmas, Magali A., Nicholas Nairn-Birch, and Jinghui Lim. *Organization & Environment* 28.4 (2015): 374-393. [\[Link\]](#)
- Who is Lobbying Congress on Climate Change? Magali Delmas. HRB.org 2016. [\[Link\]](#)

In Class Discussion

What should be done to improve the comparability and transparency of environmental reporting? What is the rationale for the development of the Global Reporting Initiative and SASB?

Session 5

Environment, Operations and Life Cycle Analysis

In this session, we will discuss Life Cycle Assessment methodologies.

[Case] Alpha Motors, Ltd: Integrating Life Cycle Environmental Concerns into Product Design (WRI) [\[link\]](#)

The objective of this case is to get a basic understanding of life cycle analysis and the issues involved when integrating life cycle tools into the product design process. (The Alpha Motors Case Spreadsheet is available on the class website.)

Case Questions

1. Barns' primary task was to draft a report to the XL2000 project manager outlining his material choice for the hood assembly. What should Barns' final recommendation be? Explain assumptions, describe the scenarios considered and discuss the sensitivity of results.
2. Should Barns use EPS in his decision making? Was it useful? What were its weaknesses?
3. Compare EPS to other life cycle analysis methods and discuss ways in which EPS is better or worse for use in product design.
4. Based on Barns' experiences, what should he recommend for utilizing life cycle methods and models into the design process? What characteristics would an ideal decision tool have?

Readings

- Life Cycle Assessment: Measuring Environmental Impact. LeVan. Forest Products Society. [\[link\]](#)

- Note on Life Cycle Analysis. Svoboda. National Pollution Prevention Center for Higher Education. [\[link\]](#)
- "The Need for a Preference-Based Multicriteria Prioritization Framework in Life Cycle Sustainability Assessment." Grubert, Emily. *Journal of Industrial Ecology* (2017). [\[Link\]](#)

In Class Discussion

Comparison of LCA methods. Environmental performance and efficiency.

Session 6

Environment, Operations and Supply Chain Management

In this session, we will discuss green supply chain management.

[Case] Wal-Mart's Sustainability Strategy [HBSP OIT71] [Available on class website]

In October 2005, in an auditorium filled to capacity in Bentonville, Arkansas, Lee Scott, Wal-Mart's president and CEO, made the first speech in the history of Wal-Mart to be broadcast to the company's 1.6 million associates (employees) in all of its 6,000+ stores worldwide and shared with its 60,000+ suppliers. Scott announced that Wal-Mart was launching a sweeping business sustainability strategy to dramatically reduce the company's impact on the global environment and thus become "the most competitive and innovative company in the world." The case describes Wal-Mart's efforts to accomplish this, focusing on three of the company's primary focus areas (seafood, electronics and textiles) and their effect on the company's operations, supplier relationships and results. It also explores how Wal-Mart is measuring and communicating its ideas about sustainability to its suppliers, associates, customers and the public.

Case Questions

1. Given the fact that Wal-Mart's customers generally are unwilling to pay a premium for environmentally friendly products, how is the company deriving business value from its sustainability strategy, or if not, how can it ensure that it does?
2. Imagine that you are Andy Rube or Tyler Elm, evaluating the progress of the electronics, seafood, and textiles networks. Which networks have been most successful? What factors explain the success (or lack of success) of these networks?
3. How is Wal-Mart motivating its suppliers to share information about and continuously reduce the environmental impacts of products and processes? How can the company stimulate the development of disruptive, breakthrough innovations?

Readings

- Walmart's Emergent Low-Cost Sustainable Product Strategy. Spicer, A., & Hyatt, D. *California Management Review*. (2017). 59(2), 116-141. [\[Link\]](#)
- Greening the Supply Chain: When is Customer Pressure Effective? Delmas, M. and Montiel, I. *Journal of Economics and Management Strategy*. 18(1): 171-201. 2009. [\[link\]](#)

Session 7

Environmental Marketing

In this session, we will discuss environmental differentiation strategies and green marketing.

[Case] Tesla Motors: A case study in disruptive innovation [\[Link\]](#)

Tesla Motors has been continuously innovating the car industry since its foundation in 2003. Tesla is recognized not just as an automaker, but also a technology and design company with a focus on energy innovation. According to its CEO Elon Musk, Tesla Motors embarked on a plan to commercialize an affordable electric vehicle in efforts to “help expedite the move from a hydrocarbon economy towards a solar electric economy.” We will explore how Tesla has been able to create a new market sector for ‘fun-to-drive’ electric cars, lured buyers from luxury brands such as BMW and Mercedes, diverged from entrenched supply chains to develop technology fast and in-house, and created a product that now guides the electric car industry as a whole.

Case Questions to be discussed in class:

1. Describe how Tesla was able to disrupt the car market
2. Is Tesla a green product? Who are Tesla consumers and why do they purchase the Tesla? Is Tesla pursuing an environmental differentiation strategy?
3. Discuss which complementary assets are necessary for Tesla to expand its market.

Readings

-
- Why electric cars aren’t always environmentally sound. Stephen P. Holland, Erin T. Mansur, Nicholas Z. Muller and Andrew J. Yates. 2016 [\[Link\]](#)
- Chapter 3. The Green Bundle: Pairing the Market with the Planet. Delmas, M. *Forthcoming* Stanford University Press. Available on CCLE.
- The private and social consequences of purchasing an electric vehicle and solar panels: Evidence from California . Magali A. Delmas, Matthew E. Kahn, & Stephen Locke. (2017). *Research in Economics*, 71(2), 225-235. [\[Link\]](#)

In Class Discussion

What are the most important factors for a successful environmental differentiation strategy? Who do you think the "green consumers" are? Where are they? Where do you believe the most opportunities exist for green marketing (product types, consumer types, geographic areas, etc)? What should the message be? What successful and unsuccessful "green marketing" campaigns are you familiar with? Why were they (un)successful?

Session 8**Environmental Communication, Ethics and Organizational Behavior**

In this session, we will discuss the ethical dimensions of environmental communication, and the risks associated with greenwashing. We will also discuss how employee engagement with sustainability might reduce greenwashing and enhance employee productivity.

[Case] Lululemon's Commitment to the Environment: A Tangle of Seaweed Suppliers, and Social Responsibility [Available on class website]

This case introduces Lululemon, an athletic and yoga wear retailer, and its commitment to the environment. The company was founded on its Corporate Social Responsibility (CSR) initiative, and took pride in its innovative approach towards the environment. The company trusted the suppliers with which it had relationships, and believed the products it was purchasing were as the suppliers described. Lululemon, faced with pressure to expand and maximize profits while maintaining its CSR pledge to the environment, found itself in a difficult

position when an environmentally-friendly fiber it used for a clothing product was determined to be marketed falsely.

Case Questions

1. Describe Lululemon's competitive strategy and the factors that explain Lululemon's greenwashing.
2. How would those few days in November 2007 affect Lululemon's strategy going forward?
3. What should Lululemon do?
4. Would Lululemon have to implement a random testing process to ensure the truth of its claims?
5. Should Lululemon continue to carry the VitaSea line?
6. How would Lululemon repair its tarnished image?
7. Lululemon's grassroots marketing strategy – focused on conveying a message of health, happiness and environmental awareness through its clothing to customers – needed to be re-vamped, but how?

Readings

- Greenwashing Report 2010. TerraChoice Marketing. 2010. [\[link\]](#)
- The Drivers of Greenwashing. Delmas, M and Cuerel Burbano, V. 2011. California Management Review. [\[Link\]](#)
- Choosing the right eco-label for your product Delmas, M., Nairn-Birch, N and Balzarova, M. Summer 2013, *Sloan Management Review* [\[Link\]](#)
- Environmental Standards and Labor Productivity. Delmas, M. and Pekovic, S. 2013. *Journal of Organizational Behavior*. 34(2): 230-252. [\[Link\]](#) See [UCLA today article](#).

In Class Discussion

- How to recognize and avoid greenwashing? What are the mechanisms that link sustainability practices and employee productivity?

Session 9

Energy, Technology and Entrepreneurship

Electricity generation accounts for over 40 percent of the carbon dioxide emitted by the United States, with residential and commercial buildings collectively accounting for over two-thirds of electricity usage (EPA 2010, EIA 2010). In this session, we will discuss the recent research describing how behavioral changes can reduce energy consumption at the individual and organizational level.

We will also play a simulation to allow you to experience the challenges of building a clean tech startup company in a demanding competitive environment, including financial, human resource, strategic and other decisions.

CleanStart: Simulating a Clean Energy Startup ([John Sterman](#), David Miller and Joe Hsueh MIT)

Link to simulation: <https://mitsloan.mit.edu/LearningEdge/simulations/cleanstart/Pages/default.aspx>

In this live, web-based simulation, participants play the role of the founder of a new startup company in the exciting and competitive clean tech sector. Can you develop your technology into a successful company? Each quarter you must set prices, decide how many engineers and sales people to hire, and set compensation, including salary, stock, options and profit sharing. Will you pitch your firm to venture capitalists or bootstrap and remain 100% employee owned? Will you win customers and become cash flow positive before you run out of funds? Will you succeed and take your firm public?

Before class, watch the instructional [video](#) here.

We will play the simulation in class and in groups. Class will meet in the computer lab.

Readings

- Saving Power to Conserve Your Reputation? The effectiveness of private versus Public Information. Delmas, M. and Lessem, N. 2014, *Journal of Environmental Economics and Management*. [\[Link\]](#) See UCLA Newsroom article [\[Link\]](#)
- NonPrice Incentives and Energy Conservation. Asensio, O. I. and Delmas, M. A. 2015. . *Proceedings of the National Academy of Sciences*. January. 112(6): E510-E515. [\[Link\]](#). See UCLA Newsroom article [\[Link\]](#) and UCLA Engage website [\[Link\]](#).
- The Effectiveness of US Energy Efficiency Building Labels. Asensio, O.I., & Delmas, M.A. 2017. *Nature Energy*. 2(17033) [\[Link\]](#). See UCLA Newsroom article [\[Link\]](#)

Session 10**Project Presentations**

In this session, you will present the results of your group projects to the class.

Peer evaluations are due by the end of the day.

MAGALI A. DELMAS

Magali Delmas is a Professor of Management at the UCLA Institute of the Environment and the Anderson School of Management. She is the director of the UCLA [Center for Corporate Environmental Performance](#). Her research interests are primarily in the areas of Business strategy and Corporate Sustainability. She has written more than 70 articles, book chapters and case studies on business and the natural environment. She works on developing effective information strategies to promote conservation behavior and the development of green markets. She is the author of *The Green Bundle: Pairing the Market to the Planet*. Forthcoming at Stanford University Press. Her current work includes the investigation of the barriers and incentives to the adoption of energy efficient solutions. She is also engaged in refining current methodologies to measure and communicate firm and product environmental and social performance.