

BUSINESS AND THE NATURAL ENVIRONMENT

UCLA INSTITUTE OF THE ENVIRONMENT

ENVIRONMENT 163

Tuesdays and Thursdays 9:30 AM to 10:45 AM

GEOLOGY 3656

ZOOM

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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. In this class, we will address the following issues:

What is the purpose of the corporation?

How does business affect the natural environment?

What are firms' incentives to be more environmentally responsive?

In this class, 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 cost savings within the business; yet other firms seek to influence government regulation in order to impose their standard on competition.

Class Format

This is a class for business and non-business students interested in the impact of business organizations on the natural environment, the forces pushing business to respond to their impacts, and the types of approaches businesses are taking and can take to respond effectively to environmental issues. This course is designed so that students from various disciplines (science, humanities, social sciences, business, education, etc.) can learn from each other without having had courses in business and management.

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 final project is a major component of the course. In this project, students analyze the environmental strategy of a company and provide recommendations for improvement.

Required Reading:

Magali Delmas with David Colgan. *The Green Bundle: Pairing the Market with the Planet*. Stanford University Press. 2018. Available at the UCLA Library, also available on [Amazon](#) and at [Stanford Press](#).

All the other required materials for the course are available online.

	Date	Class Topic	Assignments
1.	Thursday	Introduction to the Class - We will talk about the recent evolution of firms' environmental strategies and initiate the discussion on whether/how firms can be green and competitive.	Please read assigned articles and syllabus before class
2.	Tuesday	Fishbanks Strategic Game - We will play a simulation game called "FishBanks." in which you manage your own fishing company, competing with other companies.	
3.	Thursday	The Tragedy of the Commons and Collective Action	Individual assignment #1. Word document due Wednesday before 9:00 pm.
4.	Tuesday	The regulatory context of firms' strategies: The case of climate change -	
5.	Thursday	The market for Green Products	
6.	Tuesday	Life Cycle Assessment (LCA) – Alpha Motors Case Study.	
7.	Thursday	Life Cycle Assessment (LCA) (2) Life cycle assessment in its relation to cost assessment.	Final Project Overview (1-page) due Friday, 9:00 pm
8.	Tuesday	Environmental Differentiation, Marketing and Entrepreneurship - Tesla Motors Case Study	
9.	Thursday	Environmental Ethics – Volkswagen Diesel Case Study	
10.	Tuesday	The Design of effective Eco-Labels	
11.	Thursday	Environment, Operations and Supply Chain Management - Walmart Case Study	Individual assignment #2 Word document due Wednesday, before 9:00 pm
12.	Tuesday	Corporate Environmental and Financial Performance - How to evaluate corporate environmental performance, and what is socially responsible investing?	
13.	Thursday	Sustainability Ratings – What are the different dimensions of sustainability and how they are rated by sustainable investing research organizations?	Group assignment #1 due Wednesday, before 9:00 pm
14.	Tuesday	Sustainability Reporting – What are the principles of environmental accountability?	Final Project Data Collection and Preliminary Findings due Monday, at 9:00pm
15.	Thursday	Veteran Day No Class	

16.	Tuesday Nov 16	Materiality analysis KDP case study + Environmental and Social Governance (ESG) Recap	
17.	Thursday Nov 18	Corporate Social Responsibility (CSR) and Employee Engagement – Can the adoption of environmental strategies by firms can enhance employee productivity?	Individual Assignment #3 Word document due Wednesday, before 9:00 pm
18.	Tuesday Nov 23	Energy Efficiency Strategies. How to motivate people and businesses to conserve energy?	
	Thursday Nov 25	Thanksgiving No Class	
19.	Tuesday Nov 30	Energy and Entrepreneurship – Simulation Game. What are the challenges of building a clean tech startup in a competitive environment?	Final Project Report Due before 9:00pm
20.	Thursday Dec 2	Final session - In class presentations of final group projects	2-3 Groups to Present

Grading

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

Class Participation, Blog, Presentations, Pre-Lecture Quizzes	30%
Individual Write-Ups	40%
Final Project & Group Project	30% (report)

Class participation

Your **participation** in class discussions will be evaluated based on your contribution to the class discussions and analyses. Contributions move the class discussion forward and enhance everyone's learning. They can take many forms, including insightful comments, thoughtful questions, sharing directly related experiences. Participation can be via answering questions or responding to questions in the class, via blog posts and comments on LinkedIn, or via class scheduled presentations.

LinkedIn posts. Each week, you will have the opportunity to post a short blog on the themes of the week on LinkedIn on the group "Business Sustainability" [[Link](#)].

You are also encouraged to post comments to respond to the weekly posts. You will have the opportunity to blog from Week 2 to Week 9. The blog posts will be posted on LinkedIn site -and will be open to the public. When posting, please make sure to list all group members' names on the post. Please register on LinkedIn and join the group [[Link](#)]. For this post, find an interesting article related to the theme of the week, and write a short comment (100 words maximum). The idea is to provide an informed perspective on the subject and evoke responses from your fellow classmates. Tweet your post with a 140-character headline and #env163. Students are required to provide at least **one individual blog and 2 comments** on the blog during the quarter.

Class presentations are invited for some sessions and can be conducted alone or with other students.

Class absences in excess of two class sessions will adversely affect your classroom performance grade. Consistent lack of attendance will result in a course grade of unsatisfactory. However, if for some reason you will miss class or will be late for class, send me an email (delmas@ucla.edu) with a copy to the TA (tysontimmer@g.ucla.edu) before class explaining the absence or tardiness. If you know in advance that you will miss a class, let us know. When assigning the final course class participation grade, we will consider a written analysis of the missed day's case, as long as it is submitted to the TA before the 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 us an email explaining the absence within 72 hours of the missed class.

Course Website

All materials will be distributed through the course website:

<https://ccle.ucla.edu/course/view/21F-ENVIRON163-1>

Students will upload all assignments to the course website before the due date and time.

Individual Write-Up

You will need to submit 3 individual write-ups for the entire quarter.

Individual assignment #1 Tragedy of the Commons

Please respond to the 4 questions:

1. What is the "Tragedy of the Commons" and what observations did Garrett Hardin make in developing his ideas?
2. How do the ideas of "Tragedy of the Commons" play out in the management challenges of the global fisheries?
3. What other shared resources (besides the fisheries) face the same issues, as commercial/corporate interests compete and conflict with long term sustainability goals? (e.g. forests, atmosphere, ground water, and public lands)
4. Provide well-reasoned arguments on the pros, cons and likely success of several different potential approaches to avoiding the tragedy of the commons.

Individual assignment #2 Green Product Strategy

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 superior outlining how you would implement the Bundle Communication 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. Upload a word document to the course website before class.

Individual assignment #3 Environmental Performance

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).

Format for Individual Write-Ups

The individual assignments will be submitted via the class website before 9:00 pm. Each individual assignment is 2 page maximum (12 font type, single-spaced, 1 inch margins on all sides). Make sure you include at least your name within the document. ALL files must be submitted as Word documents (.doc or .docx). The name of the file should be in this format: **LAST NAME, First Name_#(number of the assignment).doc**

The honor code applies to these individual write-ups.

Quizzes

Before most lectures there is a quiz assignment link in CCLE which is due at 9:00am the day of the lecture. These quizzes are short answer questions based on the readings, cases or videos assigned for the lecture. The quizzes are open book, open note. They are intended to help you identify the major concepts from the readings and assist in preparing you for the in class discussions.

Final Group Report (maximum 4 people)

You will produce a final report recommending a 'Green Bundle' strategy for a publicly traded firm chosen from a list provided at the beginning of the class. 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." That is to say, 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. 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.

In order to provide these recommendations, you will need to compile and evaluate the current firm sustainability strategy based on the public sustainability disclosures of the company. You will collect public disclosure information based on the World Economic disclosure framework. You will describe how well your chosen company is disclosing, and how well it is performing in terms of greenhouse gases, water consumption, land use and diversity. This baseline analysis will allow you to provide recommendations for improvement by comparing the company to some of its competitors. The public disclosures from the company you chose will be found in their sustainability report, on their corporate webpages, and other voluntary disclosures such as the Carbon Disclosure Project (<https://www.cdp.net/en/responses/>) and the Sustainability Account Standards Board (<https://www.sasb.org/standards/download/>). Other sources can be used, but they must be information provided by the company itself, not information compiled by external parties (e.g., news agencies, investigative journalists, non governmental organizations). You will be provided specific financial data that corresponds to specific World Economic Forum disclosures as well as sector level disclosure information.

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.

In order to do this you will need to follow the following steps:

Fill out information on the firm current strategy using the questionnaire link provided on CCLE

Answer the following questions:

2.1. How well does firm disclose its information as compared to its competitor and to the industry on the following dimensions

- Overall disclosure

- Disclosure by pillar
- Disclosure based on SASB industry recommendations

2.2 How does your company performs as compared to its main competitor and to the other firms in its industry based on:

- GHG scope 1, 2, 3
- Water consumption
- Land use
- % of employee white, women, black, Asian etc..

2.3. What recommendations would you provide to the focal company to improve its disclosure and sustainability strategy? How would these recommendations improve the firm corporate performance?

The report should be no longer than **5** pages excluding pictures and tables (12-point font, double spaced with 1 inch margins). You are also required to submit a blog post based on your report on the Business Sustainability LinkedIn group.

Due Dates and Presentations

There are three portions to the final project that culminate in a final paper and one optional presentation.

Final Project Overview

A few weeks into the course we will briefly evaluate your progress on the final project. We will ask you to hand in a one-page overview of your final project on Friday, October 15 uploaded on the class website before 9:00 pm (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 as well as inform which disclosure sources you will use to prepare your report, the roles of each of the authors, and an approximate timeline of the steps needed to complete the project.

Data Collection and Preliminary Findings

By lecture 14, you will need to have completed the data collection and questionnaire for your assigned company. We will ask you to hand in a presentation slide deck with no more than 5 slides on your data collection and some preliminary findings on Monday, November 8 before 9:00pm. The deck should include a title slide with your team members names and the company you covered. The remaining slides should answer the following question: according to you, what are the pillars and more specific metrics for which your firm discloses well for its sustainability?

Final Paper

Due date for the final report is Wednesday, December 1st before 9:00 pm by uploading to the course website; no late assignments will be accepted. The last session of the course will be devoted to project presentations. The report should be no longer than 5 pages excluding pictures and tables (12-point font, double spaced with 1 inch margins). It must also include a Cover Page, Table of Contents, as well as a Bibliography with references (these pages do not count toward the 5 page limit). You are also required to submit a blog post based on your report on the Business Sustainability LinkedIn group.

In Class Presentation (Optional)

As we get closer to the end of the quarter, we will ask for 2 to 3 groups to volunteer to prepare and present a slide deck on their final project. The presentations will be approximately 10 minutes with 5 minutes for Q&A.

The honor code applies to the final report. We will use the Turnitin software.

1. INTRODUCTION TO THE CLASS

In this first class I will present the objective of the course, review the course outline and discuss assignments and class organization. We will talk about the recent evolution of firms' environmental strategies and initiate the discussion on whether/how firms can be green and competitive.

Readings

- "Does It Pay to Be Green? A Systematic Overview." Ambec and Lanoie. *The Academy of Management Perspectives*. 22(4): 45-62. 2008. [[link](#)]

2. FISHBANKS STRATEGIC GAME

You will play a simulation game called "FishBanks." 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 catch, births, and deaths. The company managers must contend with ecological, economic, and psychological forces. In the process, the students are actively engaged in higher-level thinking, cooperative learning, and group problem solving.

3. THE TRAGEDY OF THE COMMONS AND COLLECTIVE ACTION

Readings:

- "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](#)]

4. THE REGULATORY CONTEXT OF FIRMS' STRATEGIES: THE CASE OF CLIMATE CHANGE

In this session, we will focus on relations between firms and the political arena. We will also cover the main type of policy instruments to reduce environmental pollution and focus more specifically on Emissions trading (or cap and trade) instruments. Emissions' trading is an economic policy instrument used to control emissions by providing economic incentives for achieving emission reductions.

Assignment:

Look for information on ONE of the following cap and trade programs

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

Before class, answer the following questions about the program you chose (quiz):

1. When was the program created?
2. What is the goal of the program?
3. How many firms participated?
4. What geographical area does it cover? Which industries are included?
5. What were the lowest price and the highest price for the credits/permits.
6. What is the current price of one credit/permit?
7. How effective has this program been so far?

Readings

- Video: Cap and trade Annie Leonard [[Link](#)]
- Cap and Trade Basics [[Link](#)]

In-class discussion: what are the characteristics of market-based regulations?

5. THE MARKET FOR GREEN PRODUCTS

In this class, we will discuss the market for green products and the requirements of the final project.

Read: Chapter 1-2-3 in *The Green Bundle: Pairing the Market with the Planet*. Delmas, M.A. with David Colgan. Stanford University Press.

Assignment

Before class answer the following questions (quiz):

1. What are the top 2 reasons consumers don't purchase green products?

2. Cite 3 co-benefits of green consumption

6. COST REDUCTION THROUGH LIFE CYCLE ASSESSMENT (LCA): CASE STUDY ALPHA MOTORS, LTD (WRI).

In this session you will get a basic understanding of life-cycle analysis and the issues involved when integrating life-cycle tools into the product design process.

- Alpha Motors Case study [[Link](#)]
- Alpha Motors Case Spreadsheet. (available on CCLE).

Assignment

Before class answer the following questions (quiz):

Barns' primary task was to draft a report to his manager outlining his material choice (Steel, Aluminum or SMC) for the hood assembly.

- What are the advantages of each material?
- What are the disadvantages of each material?
- What should Barns' final recommendation be? Steel, Aluminum or SMC
- Why?

In class discussion: Should Barns use EPS in his decision-making? Was it useful? What were its weaknesses?

7. COST REDUCTION THROUGH LIFE CYCLE ASSESSMENT (LCA)

In this session, you will become familiar with the concept of life cycle assessment in its relation to cost assessment.

Readings

- Rebitzer, G., Ekvall, T., Frischknecht, R., Hunkeler, D., Norris, G., Rydberg, T., ... & Pennington, D. W. (2004). Life cycle assessment: Part 1: Framework, goal and scope definition, inventory analysis, and applications. *Environment international*, 30(5), 701-720.
- Pennington, D. W., Potting, J., Finnveden, G., Lindeijer, E., Jolliet, O., Rydberg, T., & Rebitzer, G. (2004). Life cycle assessment Part 2: Current impact assessment practice. *Environment international*, 30(5), 721-739.

Assignment

Before class answer the following questions (quiz):

1. What are some important assumptions in LCA that can drastically change the results of the analysis?
2. Give us one example of a product for which you have seen a life Cycle Assessment?
3. What elements in the value chain were included in the analysis (extraction, manufacturing production, transportation, utilization, disposal, reuse)?
4. Can you think of one element in the analysis that would change the results?

5. What environmental impacts did they include?
6. What environmental impact would you add to the presented analysis?

In class discussion: What is Life Cycle Assessment? How can this method be used in practice?

8. ENVIRONMENTAL DIFFERENTIATION, MARKETING AND ENTREPRENEURSHIP: CASE STUDY TESLA MOTORS

In this session we will discuss the conditions that make environmental differentiation strategies successful for industrial and consumer products.

[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.

Assignment

Before class answer the following questions (quiz):

1. How was Tesla able to disrupt the car market?
2. Is Tesla a green product?
3. Who are Tesla consumers and why do they purchase the Tesla?
4. Is Tesla pursuing a Bundle Strategy?
5. What complementary assets are necessary for Tesla to expand its market?

Readings

- Delmas, M. A., Kahn, M. E., & Locke, S. L. (2017). The private and social consequences of purchasing an electric vehicle and solar panels: Evidence from California. *Research in Economics*, 71(2), 225-235. [[Link](#)]
- Chapter 4, 5, 6 & 7 in *The Green Bundle: Pairing the Market with the Planet*. Delmas, M.A. with David Colgan. Stanford University Press.

In class discussion: What is an environmental differentiation strategy and what are the most important factors for a successful environmental differentiation strategy?

9. ENVIRONMENTAL ETHICS

In this session, we will discuss the ethical dimensions of environmental communication, and the risks associated with greenwashing.

[Case] Dura, C (2019). The Volkswagen emissions Scandal-Facts, Figures and Effects. *Annals of the University of Petroșani*, 21, 35-48.

The paper analyzes the unethical behavior of a big corporation in relation to the business environment and the relevant stakeholders, being focused on the famous corruption scandal caused by the car manufacturer Volkswagen, at the end of the year 2015.

Assignment

Before class answer the following questions (quiz):

1. How was the VW scandal discovered?
2. What were some of the Volkswagen's first responses to the scandal?
3. What should the company do now and in the future to avoid a similar scandal?

Readings

- Chapter 8 in *The Green Bundle: Pairing the Market with the Planet*. Delmas, M.A. with David Colgan. Stanford University Press.
- Watch Dirty Money episode #1 "Hard NOx" on Netflix

In class discussion: What can companies do to prevent scandals such as the one Volkswagen faces?

10. THE DESIGN OF ECO-LABELS

In this session we will discuss how effective eco-labels are designed.

Assignment

Before class answer the following questions (quiz):

1. What are the different ecological criteria for refrigerators between the Energy Star Label and the EU label. Use the information available on the following website: [Energy Star](#) and [EU Ecolabel](#)
2. What are some of the characteristics of eco-labels that help eco-label awareness, understanding and credibility?

Readings

- Chapter 9 in *The Green Bundle: Pairing the Market with the Planet*. Delmas, M.A. with David Colgan. Stanford University Press.

In-class discussion: How to adopt a successful environmental differentiation strategy based on a standard certification scheme or an eco-label?

11. 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.

Assignment

Before class answer the following questions (quiz):

1. Given the fact that Wal-Mart's customers generally are unwilling to pay a premium for environmentally friendly products, how can the company derive business value from its sustainability strategy?
2. How is Wal-Mart motivating its suppliers to share information about and continuously reduce the environmental impacts of products and processes?

Readings

- "Choosing the right approach to green your supply chains." Zhu, Qinghua, Joseph Sarkis, and Kee-hung Lai. *Modern Supply Chain Research and Applications* (2019). [\[Link\]](#)

12. CORPORATE ENVIRONMENTAL AND FINANCIAL PERFORMANCE

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.

Readings

- "Triangulating Environmental Performance: What do Corporate Social Responsibility Ratings Really Capture?" Delmas, M., Etzion, D., & Nairn-Birch, N. *Academy of Management Perspectives*. 2013 (available in class CCLE).
- "Measuring Corporate Social Performance: An Efficiency Perspective." Chen and Delmas. *Production and Operations Management*. 2013. [\[Link\]](#)

Assignment

Before class answer the following questions (quiz):

1. Provide 2 examples of sources of information on corporate environmental performance
2. Give 3 examples of how firms can benefit financially from improving their environmental performance.

In class discussion: What is Socially Responsible Investing and how to find corporate environmental information data?

13. SUSTAINABILITY RATINGS

In this session, we will discuss the different dimensions of sustainability and how they are rated by sustainable investing research organizations.

- SRI Case Study (available on class website)
- Data for SRI Case Spreadsheet, 1991-2014 (available on class website).

Group Assignment #1

Each group will evaluate the environmental performance of 6 firms in the chemical industry using data from MSCI KLD (<http://www.kld.com/>) and the EPA Toxic Release Inventory (<http://www.epa.gov/tri/>) provided on the class website. Describe the criteria you choose and why. Before class, you must upload a five-slide PowerPoint presentation of your findings and an Excel spreadsheet with your ranking on the class website.

The firms to compare are the following: Avon Products, Inc.; Clorox Company; Colgate-Palmolive Company; Dow Chemical Company; DuPont Company; ; and Pfizer, Inc.; For this assignment, it is important that your group:

- Presents information clearly
- Describes rational choice of metrics. Explain aggregation methodology
- Discuss issues of aggregating TRI/KLD
- Make use of financial data (sales, cost of good sold, etc...)
- Highlight limitations of KLD
- Highlight limitations of their methodology and make recommendations about methodology

Readings

- "Measuring Corporate Environmental Performance: The Trade-offs of Sustainability Ratings." Delmas and Doctri. *Business Strategy & the Environment*. 19: 245-260. 2010. [\[link\]](#)

14. SUSTAINABILITY REPORTING

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

Group Assignment #2

- Fill out information about your company based on the World Economic Forum (WEF) framework using the questionnaire posted on CCLE.
- Answer the following question: according to you what are the pillars and more specific metrics for which your firm discloses well its sustainability?

The day before class, submit a five-slide PowerPoint presentation of your findings

Readings:

- “Measuring Business Impacts on Well-being: A Goal Oriented Approach” Magali A. Delmas and Rodolphe Durand in *Measuring the Impacts of Business on Well-Being and Sustainability*, Organization of Economic Cooperation & Development p 6-18 [\[Link\]](#)

In class discussion: What should be done to improve the comparability and transparency of environmental reporting? What is a materiality analysis?

15. VETERAN DAY NO CLASS

16. MATERIALITY & ESG RECAP

[Case] KDP: Climate and Cause in a time of Change

Read the KDP case and come prepared to answer the following questions:

Assignment 1:

Use the issue mapping tool Excel file provided to you to conduct a materiality analysis on KDP by comparing each issue's potential impact on business vs. its importance to stakeholders, and answer the following questions:

1. Over the next five years, what are the top 3 material issues you recommend that KDP focus on? Please provide a rationale for the top three issues, as determined by you and/or your team.
2. How does your recommendation change if you map issues based on Time & Control instead of Impact on Business?
3. What are some of the challenges that might serve as barriers to KDP achieving your recommended goals?
4. Broadly speaking, what other market and consumer trends should KDP address in its product line as it embraces ESG metrics?

Readings: Materiality note available on CCLE

In class discussion: What is a materiality analysis?

Assignment 2:

Before class answer the following questions (quiz):

1. In 2017, how much was invested according to sustainable investing strategies in the US?
2. What is the difference between socially responsible investing and impact investing?
3. What is defined as a material issue according to SASB?
4. When do environmental issues need to be reported by the board of directors?

17. CORPORATE SOCIAL RESPONSIBILITY AND EMPLOYEE ENGAGEMENT

In this session, we will discuss how the adoption of environmental strategies by firms can enhance employee productivity.

Assignment

In preparation for the class, prepare an answer to the following question (quiz):

1. "What company would you like to work for?"
2. and why?"

Readings:

- "Environmental Standards and Labor Productivity." Delmas, M. and Pekovic, S. 2013. *Journal of Organizational Behavior*. 34(2): 230-252. [[Link](#)] See [UCLA today article](#).

18. ENERGY EFFICIENCY STRATEGIES

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 class, we will discuss the research describing how behavioral changes can reduce residential energy consumption at the individual and organizational level. We will focus on two main behavioral mechanisms: the use of information and the role of social norms. We will discuss an experiment conducted on UCLA campus.

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](#)]
- Watch video here [[Link](#)].
- Energy conservations: 10 ways to save energy [[Link](#)]

Assignment

Before class answer the following questions (quiz):

1. What is the appliance that is using the most energy in your home?
2. What is action is the most effective at saving energy in your home?

19. ENERGY AND ENTREPRENEURSHIP

In this session, we will 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 the Simulation](#)

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.

20. FINAL SESSION

Final project presentations.

MAGALIA A. DELMAS

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