

Sustainability Management Fall 2023

Time: Tuesdays, 6:10 - 8:00 pm

Location: Northwest Corner Building (NWC), Room 501

Professor: Dr. Steven Cohen

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Office Hours: For Prof. Cohen and all grading assistants, by appointment. Professor Cohen's hours are flexible and the best way to set up an appointment is to email him at sc32@columbia.edu or Sarah Howard at sch2162@sipa.columbia.edu.

Course Objectives:

Sustainability management matters because we only have one planet and we must learn how to manage our organizations in a way that ensures that our planet is maintained. The course is designed to introduce you to the field of sustainability management. This is *not* an academic course that reviews the literature of the field and discusses how scholars think about the management of organizations that are environmentally sound. It is a practical, professional course organized around the core concepts of management and the core concepts of sustainability. The course will have a specific emphasis on urban sustainability as the planet's urban population continues to expand.

Each week we will read one or two cases in management and/or sustainability along with some background material designed to help you answer questions posed at the end of each case exercise. The cases always pose practical issues for decision makers to address—but issues that are best addressed with a firm grounding in the literature of management and sustainability.

The literature and case material we will study this semester are based on lessons learned in government, nonprofits, and the private sector. However, most of my own work focuses on government and nonprofits, so this course will emphasize management in public and nonprofit organizations and the role of public policy in sustainability.

In this course, you will be assigned to one team that will present a briefing in class on an assigned position for a particular case. You will also write three, two-page memos according to a specified format (see "[Action Memo Format](#)" document on Courseworks). The syllabus includes a schedule for each assignment. There is also a semester project in which you will write your own case study on sustainability management. This assignment is due on **December 12th**. To facilitate class discussion, I will also assign you (in advance of class) discussion quotes and questions from my *State of the Planet* weekly blog piece which will focus on our weekly topics. These questions are available on Courseworks.

Method of Evaluation

1. Individual Case Memos – 45%
2. Group Case Presentation and Memo – 10%
3. Blog Presentation – 5%
4. Class Participation – 5%
5. Case Study Semester Project – 35%

Grading Policy

ALL ASSIGNMENTS MUST BE SUBMITTED ON TIME. ANY LATE SUBMISSIONS RECEIVE AN AUTOMATIC REDUCTION OF ONE-HALF LETTER GRADE. IF AN ASSIGNMENT IS AN HOUR LATE OR A MONTH LATE, THE PENALTY IS THE SAME. IT IS A SMALL PENALTY AND IS NON-NEGOTIABLE.

Group Processes

*Each student will have **one** group case project to complete and **one** blog discussion to participate in.* Groups will be assigned randomly in advance of the first class session, and one person will be assigned the role of group manager for the group case projects. Students that add the course late will be added to an existing group. Groups will consist of 5-6 members.

Group Case Studies

1. Group members are responsible for setting meetings and identifying roles and responsibilities.
2. The group manager will submit a work plan to Sarah two weeks prior to presentation, outlining each person's role and a timeline for completed activities. *(Note: For groups presenting during Week 2 please send workplan two days prior to presenting; for groups presenting during Week 3 please send workplan one week prior to presenting.)*
3. The group manager will email the PowerPoint presentation to Sarah by 9:00 am on the day of the presentation.
4. One person in the group will submit the written memo via Courseworks.
5. The entire group will give a 10-minute presentation on the case questions followed by a 5-minute Q&A at the start of class on the assigned date. Each member of the group is required speak; for groups with more members than case study questions, it is up to the group to decide which question to have two people collaborate on/share a response.
6. Deliverables: Workplan, written memo, 10-minute presentation with slide deck.

Group Blog Discussions

1. Each case group will also be assigned a blog discussion to lead, often partnering with another case group (i.e., two groups may be assigned to 1 blog post and the groups are expected to work together to give 1 panel discussion)
2. Among the group members assigned to a case, a group Chair should be appointed, questions should be delegated, and responses planned in advance of class.
 - a. Slides are not required, though if they are planned to be used, the PowerPoint presentation should be emailed to Sarah by 9:00 am the day of the presentation.
3. The entire group, moderated by the Chair, leads a 10-minute panel discussion on the discussion questions of the blog to which they are assigned, followed by a 5-minute Q&A session with the full class. Each member of the group is required speak; for groups with more members than blog discussion questions, it is up to the group to decide which question to have two people collaborate on/share a response.
4. Deliverables: 10-minute panel discussion

School Policies and Expectations:

Accessibility Statement – I want you to succeed in this course. Contact disability@columbia.edu for learning accommodations.

Names/Pronouns – You deserve to be addressed in a manner that reflects your identity. You are welcome to tell me your pronoun(s) and/or name (if different from University records) at any time, either in person or via email.

Discrimination – We embrace the diversity of gender, gender identity & expression, sex, sexual orientation, race, ethnicity, national origin, age, religion, disability status, family status, socioeconomic background, and other visible and non-visible identities. Columbia University does not tolerate unlawful discrimination, discriminatory harassment, sexual assault, domestic violence, dating violence, stalking, or sexual exploitation and all such conduct is forbidden by Columbia University Policy.

Duty to Report – You deserve a University community free from discrimination, harassment, and gender-based misconduct including sexual harassment, sexual assault, domestic and dating violence, stalking, and sexual exploitation. It is therefore University policy to require Columbia faculty and staff to report to EOAA any instance or allegation of prohibited conduct involving any undergraduate or any graduate student that is disclosed to, observed by, or otherwise known to that employee. This requirement to report is in place to help ensure that students are provided appropriate resources and to allow the University to mitigate harm to our community.

Confidential Resources - There are confidential resources on campus who do not have a Duty to Report, including:

- Sexual Violence Response & Rape Crisis/Anti-Violence Support Center (SVR)
- Ombuds Office
- Medical Services
- University Counseling and Psychological Services
- University Pastoral Counseling
- Columbia Office of Disability Services

University employees working in a confidential capacity will not report information shared with them.

Inclusion - In the M.S. in Sustainability Management program, faculty, and staff are committed to the creation and maintenance of “inclusive learning” spaces – classrooms and other places of learning where you will be treated with respect and dignity, and where all individuals are provided equitable opportunity to participate, contribute, and succeed.

In our classroom, all students are welcome regardless of race/ethnicity, gender identities, gender expressions, sexual orientation, socio-economic status, age, disabilities, religion, regional background, Veteran status, citizenship status, nationality, and other diverse identities that we each bring to class.

Schedule

Week 1, September 5:	Introduction to Management, Public Management, & Sustainability Management and Reviewing the Syllabus: Individual Memo & Group Case Assignments Explained.
Week 2, September 12:	Internal Organizational Management: People, Work, Money, and Information
Week 3, September 19:	External Organizational Management: Strategy and Communications
Week 4, September 26:	The Role of Government and Politics in Promoting Sustainability
Week 5, October 3:	Management in the 21st Century: Sustainability, Outsourcing, Supply Chains, Network Management, and Public-Private Partnerships
Week 6, October 10:	Sustainability Leadership: Panel Discussion
Week 7, October 17:	Sustainable Business and Finance
Week 8, October 24:	Sustainability Metrics, Management Innovation, and Quality Management
Week 9, October 31:	Sustainable Urban Systems: Defined and Explained - Dr. Dong Guo
Week 10, November 7:	No Class - Election Day
Week 11, November 14:	The Current State of Environmental Degradation: What are Its Causes, and What Strategy can be used to Develop a Renewable Resource Based Economy?
Week 12, November 21:	Public Sector Infrastructure and the Development of The Circular Economy
Week 13, November 28:	Sustainability and Equity
Week 14, December 5:	Changing Environmental Politics and the Progress Made Toward a Renewable Economy

Required Readings

Readings for each week can be found on the Modules tab.

1. Steve Cohen, William Eimicke, Alison Miller, [Sustainability Policy: Hastening the Transition to a Cleaner Economy](#) (must purchase; purchase link available on Courseworks)
2. Steven Cohen, William Eimicke, *Management Fundamentals* (on Courseworks)
3. Steven Cohen, [Environmentally Sustainable Growth: A Pragmatic Approach](#)
4. Fairchild and Weinrub, ["Introduction."](#) *Energy Democracy: Advancing Equity in Clean Energy Solutions* (on Courseworks)
5. Steven Cohen and Dong Guo, *The Sustainable City, 2nd edition*, (on Courseworks)
 - a. Chapter 1: "Defining the Sustainable City"
 - b. Chapter 2: "Sustainable Urban Systems"
 - c. Chapter 3: "The Sustainable Lifestyle"
 - d. Chapter 5: "The Role of Politics and Public Policy in Building Sustainable Cities"
 - e. Chapter 6: "Sustainable Urban Development"
 - f. Chapter 9: "The Building of the Smart Grid"
6. New York State (2016). ["Reforming the Energy Vision" White Paper](#)
7. Black and Cherrier (2010). ["Anti-consumption as part of living a sustainable lifestyle: Daily practices, contextual motivations and subjective values."](#) *Journal of Consumer Behavior*
8. O'Rourke, D. (2014). ["The Science of Sustainable Supply Chains."](#) *Science*.
9. Lueneburger and Goleman (2010). ["The Change Leadership Sustainability Demands."](#) *MIT Sloan Management Review*
10. Haigh and Hoffman (2012). ["Hybrid organizations: The next chapter of sustainable business."](#) *Organizational Dynamics*
11. Daniel Kammen, et al. (2018), "Patagonia's Path to Carbon Neutrality (on Courseworks)
12. International Energy Agency (2020). ["World Energy Outlook 2020, Executive Summary."](#)
13. Schwarz, J., B. Beloff and E. Beaver (2002). ["Use sustainability metrics to guide decision-making."](#) *Chemical Engineering Progress*
14. Hodge and Greve (2017). [On Public-Private Performance: A Contemporary Review.](#) *Public Works Management and Policy*
15. Weber, Elke (2017). ["Breaking cognitive barriers to a sustainable future,"](#) *Nature Human Behavior*
16. Ellen MacArthur Foundation. (March, 2019). [Circular Economy in Cities: Project Guide.](#)
17. Atalay Atasu, Celine Dumas, Luk Wassenhove, "The Circular Business Model" (on Courseworks)
18. Jose Galan, "How I Did It: The CEO of Iberdrola on Committing to Clean Energy" (on Courseworks)
19. *State of the Planet Blog Posts* **and** Questions are available via Courseworks:
 - a. Blog links are available on Courseworks in the Modules section for each week:
 - i. [Organizations Ignoring ESG Issues Are Asleep](#)
 - ii. [The Private Sector Push for Environmental Sustainability](#)
 - iii. [President Biden's Environmental Record](#)
 - iv. [The Challenge of Sustainable Supply Chains](#)
 - v. [Fossil Fuels Are Dying, but They're Not Dead Yet](#)

- vi. [The Impact of the SEC Climate Disclosure Rule on Sustainability Education and Management](#)
 - vii. [Climate-Fueled Extreme Weather: Protection, Recovery, and Reconstruction](#)
 - viii. [Congestion Pricing is Stuck in New York’s Political Traffic](#)
 - ix. [Jackson Mississippi and America’s Infrastructure Crisis](#)
 - x. [Environmental Justice Delayed Has Been Justice Denied](#)
 - xi. [The Pace of the Transition to an Environmentally Sustainable Economy](#)
- b. Questions are available in on Courseworks in the Modules section on each “Week Overview” document. Questions can also be found in the syllabus.
20. Case Studies are available in the following locations:
- a. *The Sustainable City* 2nd edition (on Courseworks)
 - Chapter 7: “Waste Management in New York City, Hong Kong, and Beijing”
 - b. Harvard Business School Publishing

You must purchase these online in our Coursepack at:
<https://hbsp.harvard.edu/import/1071221>

 - “Alibaba Group Holding Limited: Why and How Does Leadership Matter to a Company’s Growth, Success and Future Prospects?” – Product #: NTU339-PDF-ENG
 - “Unpacking Plastic Packaging: Carvajal Empaques and the Challenge of Reimagining the Product Life Cycle” – Product #: IS0003-PDF-ENG
 - “Mexico City’s Hoy No Circula: Restricting Car Travel to Abate Air Pollution (A)” – Product #: KS1382-PDF-ENG
 - “Mexico City’s Hoy No Circula: Restricting Car Travel to Abate Air Pollution (B)” – Product #: KS1383-PDF-ENG
 - “Center for Sustainable Agriculture (CSA): Expanding a Business Model” – Product #: W28395-PDF-ENG
 - “FIJI Water: Carbon Negative? (Abridged)” – Product #: 623004-PDF-ENG
 - “Sustainability Reporting at Dollar Tree, Inc.” – Product #: 122044-PDF-ENG
 - “Driving Decarbonization at BMW” – Product #: 123008-PDF-ENG
 - “Mandalay Homes: Building Sustainable Innovation in Residential Construction” – Product #: W03C79-PDF-ENG
 - “MeCycle: A New Way to Recycle” – Product #: W27147-PDF-ENG
 - “Building Sustainability and Circularity at JSW Steel” – Product #: W26535-PDF-ENG
 - “NIO: Battling Tesla with Battery as a Service” – Product #: SMU018-PDF-ENG
 - “The Making of a Public Health Catastrophe: A Step-by-Step Guide to the Flint Water Crisis” – Product #: KS1368-PDF-ENG

Summary of Due Dates

Cases will be due by 6:10PM on the due date via upload to the Assignments tab on Courseworks.

Week	Case Study	Assignments
Week 1 – 9/5	None	None
Week 2 – 9/12	Alibaba Group Holding Limited: Why and How Does Leadership Matter to a Company’s Growth, Success, and Future Prospects?	Group Case #1 DUE SEMESTER PROJECT: NAME OF ORGANIZATION DUE
Week 3 – 9/19	Unpacking Plastic Packaging: Carvajal Empaques and the Challenge of Reimagining the Product Life Cycle	Group Case #2 DUE
Week 4 – 9/26	Mexico City’s Hoy No Circula: Restricting Car Travel to Abate Air Pollution (A and B)	Group Case #3 DUE
Week 5 – 10/3	Center for Sustainable Agriculture (CSA): Expanding a Business Model	Individual Memo #1 DUE
	FIJI Water: Carbon Negative? (Abridged)	Group Case #4 DUE
Week 6 – 10/10	None (Alumni Panel)	None
Week 7 – 10/17	Sustainability Reporting at Dollar Tree, Inc.	Group Case #5 DUE
Week 8 – 10/24	Driving Decarbonization at BMW	Individual Memo #2 DUE
Week 9 – 10/31	Waste Management in New York City, Hong Kong, and Beijing	Group Case #6 DUE
	Mandalay Homes: Building Sustainable Innovation in Residential Construction	Group Case # 7 DUE SEMESTER PROJECT: CASE STUDY OUTLINE DUE
Week 10 – 11/7	NO CLASS (ELECTION DAY)	
Week 11 – 11/14	MeCycle: A New Way to Recycle	Group Case #8 DUE
Week 12 – 11/21	Building Sustainability and Circularity at JSW Steel	Individual Memo #3 DUE
	NIO: Battling Tesla with Battery as a Service	Group Case #9 DUE
Week 13 – 11/28	The Making of a Public Health Catastrophe: A Step-by-Step Guide to the Flint Water Crisis	Group Case # 10 DUE
Week 14 – 12/5	None (Course Conclusions Lecture)	None
Week 15 – 12/12	NO CLASS — SEMESTER PROJECT: FINAL VERSION DUE	

Week 1 (September 5): 1. Introduction to Management, Public Management, and Sustainability Management and 2. Reviewing the Syllabus: Individual Memo and Group Case Assignments Explained.

Reading Assignment:

- Management Fundamentals: Chapters 1 and 2 (on Courseworks)
- Sustainability Policy: Hastening the Transition to a Cleaner Economy: Chapter 1 (must purchase)
- Environmentally Sustainable Growth: A Pragmatic Approach: Chapter 1 (on Courseworks)

Video Assignment:

- [Sustainability Management: Lessons From and For New York City, America, and the Planet](#)
- [What is Sustainable Development?](#)

Week 2 (September 12): Internal Organizational Management: People, Work, Money, and Information.

Reading Assignment:

- Management Fundamentals: Chapters 3 and 4 (on Courseworks)

Video Assignment:

- [Google's Organizational Culture](#)

Group M and Group O Blog Discussion: [Organizations Ignoring ESG Issues Are Asleep](#)

1. How do corporate considerations of environmental impact and risk reflect sound management practices?
2. What is the significance of corporate-community relationships?
3. How have modern advances in communications changed expectations about a corporation's interactions with stakeholders?
4. Why might a company benefit from having staff dedicated to sustainability efforts?
5. What is the impact of the politicization of ESG investing?
6. What are the benefits of a corporate structure that promotes the value of diversity?
7. What are the challenges to ESG presented by some fossil fuel companies?
8. How and why have ESG concerns influenced large corporations?
9. What are the problems with the metrics used to measure ESG investments? How might they be remedied?
10. What motivation do investors have to invest in ESG funds or ESG-certified companies?

SEMESTER PROJECT: NAME OF ORGANIZATION DUE

Include the name of the organization you'd like to focus your case study on (if not maintaining anonymity) and a brief paragraph describing the organization's background information—sector, mission and vision, location, organization size, and business model.

Group Case #1: Alibaba Group Holding Limited: Why and How Does Leadership Matter to a Company's Growth, Success, and Future Prospects?

Group A: In order to serve environmentally conscious investors, as well as public opinion in its largest markets, the Alibaba Group announces its commitment to sustainability within all aspects of its operations. You are a leadership consultant hired by Alibaba to oversee the implementation of its goals and the transition of Jack Ma's nominal succession by Daniel Zhang (although Ma remains a lifetime Partner and retains a vital role in the organization's culture). Your report will advise the best course of action in the wake of Alibaba's new responsibility.

1. How can Jack Ma's characteristics as a leader be utilized in implementing sustainability throughout the Alibaba Group? Evaluate the pros and cons of his leadership style.
2. Is Jack Ma's retirement from his current position important even if he remains at Alibaba in a different capacity? What is the importance of leadership turnover?
3. How can the messaging of the values and stated goals of the company lend themselves to introducing a culture of sustainability within the organization?
4. What policies / company culture can leverage the institutional knowledge of previous / outgoing leaders while embracing new ideas from incoming leaders?
5. Just as Ma wanted Alibaba to pioneer a new, Asia-centric model for e-commerce, how can sustainability protocols draw from leaders in the field across the world while retaining cultural sensitivity?

Group B: Jack Ma and Alibaba's Values

1. Alibaba advertises six core values: commitment, teamwork, embrace change, customer first, integrity, and passion. Are there any core values that you believe should be added or revised?
 2. What is the importance of an empathetic style of leadership? How did Jack Ma embody this style of leadership?
 3. What is the relationship between charisma and leadership? Is charisma absolutely necessary to be an effective leader?
 4. In what ways can a leader show care about employees' well-being and happiness, other than the examples of Jack Ma given in this case?
 5. Describe how Ma's sense of humor strengthened his connections with employees and business associates.
 6. Evaluate Jack Ma's policies regarding performance-based rewards? What are the benefits and weaknesses of his strict standards for rewards?
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Week 3 (September 19): External Organizational Management: Strategy and Communications

Reading Assignment:

- Management Fundamentals: Chapters 10 and 11 (on Courseworks)

Video Assignment:

- [Patagonia and Transparency](#)

Group I and Group P Blog Discussion: [The Private Sector Push for Environmental Sustainability](#)

1. According to the article, what is the most likely motivation behind the private sector's increased awareness of social and environmental responsibility?
2. How does this blog describe the relationship between profitability and environmental sustainability management?
3. What is the significance and impact of carbon disclosure?
4. How do carbon disclosure policies enhance transparency and promote effective management?
5. In addition to those required by government rules, what kind of operational changes need to be made to reduce negative environmental impact?
6. How does public opinion influence a company's environmental sustainability?
7. Why are both General Motors and the state of California pursuing goals promoting electric vehicle use? What do they have in common and what distinguishes their motivations?
8. The article mentions that some increases in sustainability reporting may be due to greenwashing – how does inauthentic communication and messaging impair sustainability?
9. Is corporate social responsibility feasible?
10. How does corporate social responsibility impact the profit motive?
11. What communication strategies may be most effective in conveying environmental sustainability strategies? What are the benefits of such messaging?

Group Case #2: Unpacking Plastic Packaging: Carvajal Empaques and the Challenge of Reimagining the Product Life Cycle

Group C: In 2015, Carvajal Empaques created PlastiConscienca, an internal program that educated employees about plastics and recycling. In 2017, it launched an external information campaign that sought to educate consumers about closing the product cycle (“Change the course of plastic, change your world”). Carvajal Empaques also launched the Reciclatón initiative to boost consumer awareness.

1. Explain the pros and cons of internal messaging programs like PlastiConscienca.
2. For their 2017 information campaign, Carvajal Empaques coordinated with external organizations, including shopping centers and universities. Explain the importance of this coordination and how might Carvajal Empaques pursue additional relationships with outside organizations?

3. Evaluate Carvajal Empaques' Reciclación initiative, which operates monthly. What are the benefits and drawbacks of periodic programs like this?
4. How might Carvajal Empaques attempt to change the consumer perception that post-consumer plastic products are low quality?
5. The case offers several examples of Carvajal Empaques's efforts to raise consumer awareness about plastics and recycling. How would you change these programs to increase their long-term effectiveness for the sustainability goals of Carvajal Empaques?

Group D: You are a member of the Sustainability Team at Carvajal Empaques, reporting to the Head of Corporate Sustainability, Ana Milena Muñoz. You are the liaison between Carvajal Empaques and Recicloplas, an organization of trade recyclers, and are tasked with reevaluating the future of Recicloplas and its relationship with Carvajal Empaques.

1. How could Carvajal Empaques benefit from helping Recicloplas expand?
2. What does it mean for Carvajal Empaques to operate as an "anchor company" for trade recyclers?
3. Describe the legislative, regulatory, and technological difficulties associated with the evolution of Recicloplas' business.
4. Propose ways for Carvajal Empaques to integrate partnerships like the one with Gesampa into consistent sustainability initiatives. What is the importance of focusing attention on local areas?
5. Which strategies should you suggest that Ana Milena prioritize when presenting her sustainability plan to the company?
6. By 2016, Carvajal Empaques was effectively subsidizing Recicloplas. Is it feasible or advisable to continue the relationship between the two companies?

Week 4 (September 26): The Role of Government in Promoting Sustainability

Reading Assignment:

- Sustainability Policy: Hastening the Transition to a Cleaner Economy: Chapters 2 and 3 (must purchase)
- Management Fundamentals: Chapter 7 (on Courseworks)
- The Sustainable City: Chapters 1 and 5 (on Courseworks)
- Environmentally Sustainable Growth: A Pragmatic Approach: Chapter 6 (on Courseworks)
- New York State, 2016, "[Reforming the Energy Vision](#)" White Paper (on Courseworks)

Video Assignment:

- [GSFA 2017 | C40 Cities and Citi Foundation | We Live Here Together](#)

Group K and Group Q Blog Discussion: [President Biden's Environmental Record](#)

1. What is the difference between paying attention to symbols and focusing on performance?
2. How has President Biden used executive power to promote the transition to a greener economy?
3. What is the importance of regulatory tools in this transition?

4. What is the role of compromise in modern environmental policy?
5. How is Biden utilizing subsidies as a tool in the transition to a green economy?
6. How has President Biden used the executive's spending power to promote decarbonization?
7. What is the tradeoff that Biden made in order to pass the Inflation Reduction bill? What are the negative and positive effects of these compromises?
8. How has the role and power of the EPA changed during the last two presidencies?
9. What role does political polarization play in the environmental policy-making process?
10. How does the Supreme Court's decision in *EPA vs West Virginia* impact the ability of the EPA to decarbonize and regulate fossil fuel companies?

Group Case #3: Mexico City's Hoy No Circula: Restricting Car Travel to Abate Air Pollution (Documents A and B)

Group E: You are a sustainability official working for the Mayor of Mexico City and are tasked with writing a report with policy recommendations to revise, update, and improve the Hoy No Circula program since its modifications in 2014.

1. What changes can be made to incentivize the use of public transportation?
2. What alternatives, other than public transportation, might the government want to incentivize? How would you do so?
3. How might high-pollution workarounds and loopholes be eliminated?
4. What measures / Key Performance Indicators would be most effective in measuring the impact of the program on pollution and air quality in Mexico City?
5. Evaluate Hoy No Circula's current impact on equity in Mexico City. In what ways can environmental regulations be designed to affect residents equitably?
6. Given the importance of the program's messaging around climate change and the need for the public to abide by its regulations, what language can be utilized in communications to incentivize adherence to rules?

Group F: You are a researcher with the think tank México Evalúa and are putting together a report for policymakers and government officials in Mexico. Your audience expects recommendations for the future of environmental programs like Hoy No Circula in Mexico.

1. Beginning in 1995, No Hoy Circula was linked to Mexico City's vehicle inspection system. Are there other programs facilitated by the municipal government that could effectively reduce emissions when expanded?
2. Should Mexico City's government do more than No Hoy Circula to discourage car ridership, as some critics have suggested? If so, what are a few potential policies to consider?
3. Emissions generated in Mexico City have impact beyond the city. Are city-level approaches to pollution abatement effective in the long term? Is No Hoy Circula futile if it is confined within Mexico City's limits?
4. Hoy No Circula is an example of environmental policy in an urban area. How does the role of government in promoting sustainability differ between urban, suburban, and rural governments?
5. How might Mexico City encourage other municipal governments in Mexico to expand their environmental policies?

Week 5 (October 3): Management in the 21st Century: Sustainability, Outsourcing, Supply Chains, Network Management, and Public-Private Partnerships

Reading Assignment:

- O'Rourke, D. (2014). "[The Science of Sustainable Supply Chains.](#)" *Science*. (on Courseworks)
- Lueneburger and Goleman (2010). "[The Change Leadership Sustainability Demands.](#)" *MIT Sloan Management Review* (on Courseworks)
- Management Fundamentals: Chapters 8 and 9 (on Courseworks)
- The Sustainable City: Chapter 9 (on Courseworks)
- "Patagonia's Path to Carbon Neutrality" (on Courseworks)
- Hodge and Greve. (2017). [On Public-Private Performance: A Contemporary Review.](#) *Public Works Management and Policy* (on Courseworks)

Video Assignment:

- [Modernizing LaGuardia: Skanska's Role in the \\$5.1B Public-Private Partnership](#)
- [Fjällräven - Re-Känken - Designer's Vision](#)

Group B and Group N Blog Discussion: [The Challenge of Sustainable Supply Chains](#)

1. What are the limitations to the concept of a supply chain?
2. Why might they better be called supply webs or networks?
3. What are the main goals of sustainability management regarding supply chains?
4. What are the benefits of measuring and regulating the environmental impact of supply chains?
5. Why are supplier-customer relationships essential to building sustainable supply chains?
6. How can multinational companies create incentives for their procurement officials to pursue environmental and social goals. What might these incentives look like?
7. What is the relationship of supply chain sustainability to effective organizational management?
8. How can a combination of public and private actions facilitate more sustainable supply chains? What actions could each party take?
9. How might Scope 3 emissions be factored into the SEC's disclosure rule? What are the results of excluding the measurement of supply chain emissions?
10. Although multinational companies sometimes ask first-tier suppliers to comply with environmental regulations and spread the standards through their own supply chain, suppliers often knowingly don't follow them. Why are the practices of lower-tier suppliers almost always worse?
11. How can companies protect themselves from backlash or scandals regarding the environmental, social, and financial risks of suppliers?

Individual Case #1: Center for Sustainable Agriculture (CSA): Expanding a Business Model (Please read and follow the "Action Memo Format" document on Courseworks)

How can the CSA organic farming model be expanded into other states? Use the data provided in Exhibit 3 to support your analysis.

1. What public, non-governmental, and private partnerships are essential for the Center for Sustainable Agriculture to Succeed? How can the Center facilitate these relationships

upon expansion? What factors contributed to the previously unsuccessful public and independent efforts of India's agricultural industry?

2. Which state offers the opportunity to most expand the number of farmer-centered partnerships?
3. In which state would the Center for Sustainable Agriculture face the greatest challenges to expansion?
4. What Key Performance Indicators are essential for the Center for Sustainable Agriculture to assess their impact on the communities they serve?
5. What communication strategies can the Center for Sustainable Agriculture utilize to influence attitudes toward organic farming among farmers and local governments? How can Sahaja Aharam shift consumer mindsets toward buying organic goods and facilitate the forward integration of organic farming?

Group Case #4: FIJI Water: Carbon Negative? (Abridged)

Group G:

1. How can FIJI Water modify its marketing strategy in order to prove their commitment and action toward sustainability to investors and environmentally conscious consumers?
2. FIJI Water aims to be carbon negative by offsetting carbon emissions through reforestation. How should FIJI and other large companies balance reducing their carbon footprint through modifying operations with offsetting existing emissions?
3. The Climate Action Reserve does not widely allow forward crediting to offset emissions and instead encourages prompt or forward delivery of offset emissions. Why so – what are the benefits and challenges of forward crediting for environmental organizations?
4. What are the benefits of the forward crediting process?
5. How does FIJI Water's collaboration with Conservation International work?
6. Why might the financial tie between FIJI Water and Conservation International (CI) be viewed negatively? Do FIJI and CI need to rethink the structure of their partnership?

Group H:

1. FIJI Water is intrinsically linked to its *place* of production. Consequently, there exist only limited opportunities to improve supply routes. How might FIJI Water ensure its supply routes are as sustainable as possible?
2. The Mother Jones cover shown in Exhibit 4 claims that "locals drink dirty water." What are the ethical considerations around removing a scarce resource like fresh water and selling it elsewhere as a luxury product?
3. FIJI Water's website claims that its product is shipped on empty, returning cargo ships, but there are reports that this may not be true. How can FIJI Water improve its messaging to boost confidence in the sustainability of its supply chains?
4. Should FIJI Water consider leaving some international markets to reduce its lengthiest supply chains?
5. Does offsetting carbon emissions justify FIJI's large carbon footprint compared to competitors?

Week 6 (October 10): Sustainability Leadership: Career Development Lecture & Alumni Panel

Week 7 (October 17): Sustainable Business and Finance

Reading Assignment:

- Management Fundamentals: Chapter 6 (on Courseworks)
- Environmentally Sustainable Growth: A Pragmatic Approach: Chapter 4 (on Courseworks)
- Haigh and Hoffman (2012). "[Hybrid organizations: The next chapter of sustainable business.](#)" *Organizational Dynamics* (on Courseworks)
- Jose Galan (2020). "How I Did It: The CEO of Iberdrola on Committing to Clean Energy" (on Courseworks)

Video Assignment:

- [Delivering Impact: Sustainable Business and Finance at Bloomberg](#)

Group D and Group T Blog Discussion: [Fossil Fuels Are Dying, but They're Not Dead Yet](#)

1. What factors prevent the feasibility of an immediate transition away from fossil fuels?
2. Does the call for an immediate transition away from fossil fuels hurt the transition to a green economy in the long run?
3. Explain the tension between environmental equity concerns and the political and operational reality of self-interest.
4. Are there ways to hold the developed world accountable for its part in climate damage?
5. Are there benefits to events like COP27 beyond their symbolic purpose? How do such events contrast with the utility of legislation like Local Law 97?
6. What is needed to facilitate the long journey to complete decarbonization?
7. What is the conflict between extremism and moderation in the decarbonization debate?
8. What does moderation, in the context of a sustainable future, look like?
9. What is the media's impact on public opinion regarding decarbonization? What is the role of environmental activists?
10. What financial benefits result from the transition toward a sustainable economy?
11. What social and equity concerns must be considered when discussing the transition away from fossil fuels?

Group Case #5: Sustainability Reporting at Dollar Tree, Inc.

You are part of a consulting team tasked with developing a strategy of response to As You Sow's ESG shareholder proposal. The response requires a recommendation on whether Dollar Tree should vote for or against the resolution.

Group I:

1. Has Dollar Tree taken meaningful and sufficient action to address climate risks and opportunities?
2. Does the firm need to set more ambitious and targeted sustainability goals and practices to accelerate the pace of its climate initiatives?
3. If so, suggest new sustainability goals. If not, explain why the current goals are sufficient.

4. What impact has shareholder activism had on Dollar Tree's sustainability efforts, disclosures, and operations in the past?
5. What is the importance of competition in stakeholders' evaluation of As You Sow? Why might Dollar Tree be more inclined to improve its climate initiatives if its competitors are doing so?
6. How valid and feasible are the demands established by As You Sow, especially regarding net-zero targets and Scope 3 emissions?

Group I:

1. How has the rise of sustainable investment and socioeconomic pressures induced higher demand for companies to integrate sustainability reporting and corporate responsibility into their business strategies?
2. What is the role and efficacy of shareholder advocacy in driving change?
3. How does Dollar Tree compare to other leaders in its industry in relation to environmental sustainability goals and achievement?
4. Evaluate Dollar Tree's sustainability reporting and disclosure approach. In what ways is it effective and how might you consider it ineffective?
5. How might Dollar Tree's sustainability reporting be improved regardless of the adoption of As You Sow's shareholder proposal?

Week 8 (October 24): Sustainability Metrics, Management Innovation, and Quality Management

Reading Assignment:

- Management Fundamentals: Chapter 5 (on Courseworks)
- Sustainability Policy: Hastening the Transition to a Cleaner Economy: Chapter 6 (must purchase)
- Environmentally Sustainable Growth: A Pragmatic Approach: Preface and Chapter 7 (on Courseworks)
- Schwarz, J., B. Beloff and E. Beaver. (2002). "[Use sustainability metrics to guide decision-making.](#)" *Chemical Engineering Progress* (on Courseworks)

Video Assignment:

- [The Sustainability Scorecard, by Bloomerang](#)
- [Our 2018 Unilever Sustainable Living Plan Progress: Eight Years of Pioneering and Learning](#)

Group F and Group R Blog Discussion: [The Impact of the SEC Climate Disclosure Rule on Sustainability Education and Management](#)

1. Why are some analysts critical of the establishment of mandatory sustainability metrics?
2. What historical context led to the creation of accounting standards and regulations by the SEC?
3. How are accounting and environmental disclosure regulations similar – in purpose and in effect?
4. How do data disclosure requirements impact organizational behavior?
5. What are the benefits of climate disclosure regulations? How do they impact investment?
6. Why are ESG initiatives facing backlash? What are some ways to depoliticize environmentally-conscious investing?

7. In what ways does the dynamism of environmental regulation and disclosure influence sustainability education?
8. What steps can be taken in the future to improve the new SEC climate disclosure rule?
9. What other forms of climate transparency or ESG-related disclosures should companies adopt? Should these disclosures be mandated?
10. How do these disclosure rules enhance the practice of sustainability management?

Individual Case #2: Driving Decarbonization at BMW

(Please read and follow the "Action Memo Format" document on Courseworks)

1. How does BMW's approach to transitioning to sustainable business policies differ from competitors? How can BMW communicate its strategies to the public, regulators, and investors?
2. How do BMW's shareholder preferences and valued KPIs influence the company's approach and ability to transition to sustainable cars?
3. What entities (public or private) could BMW collaborate with in order to prioritize reducing upstream emissions?
4. How might the data on Scope 1, 2, and 3 emissions impact BMW's decisions on prioritizing decarbonization across operations

Week 9 (October 31): Sustainable Urban Systems: Defined and Explained, Guest Lecture by Professor Dong Guo

Reading Assignment:

- International Energy Agency (2020). ["World Energy Outlook 2020, Executive Summary."](#) (on Courseworks)
- Sustainability Policy: Hastening the Transition to a Cleaner Economy: Chapter 5 (must purchase)
- The Sustainable City: Chapters 2 and 7 (Case Study) (on Courseworks)
- Environmentally Sustainable Growth: A Pragmatic Approach: Chapters 2 & 3 (on Courseworks) [New York City's trash dilemmas—and opportunities](#) (on Courseworks)

Video Assignment:

- [Paris' Grand Plan to Become Europe's Greenest City](#)
- [What is the Most Sustainable City in the World?](#)

Group H and Group S Blog Discussion: [Climate-Fueled Extreme Weather: Protection, Recovery, and Reconstruction](#)

1. How has climate change influenced the intensity and frequency of extreme weather events? How will it impact these events in the future?
2. How might climate resiliency and emergency management be depoliticized? Why is it politicized in the first place?
3. What kind of projects should we invest in to construct a more resilient built environment?
4. What factors are important to consider when discussing the construction of projects to increase the resilience of cities or communities?
5. How can one obtain an independent analysis of infrastructure proposals and why is such an analysis important?

6. What is the importance of building infrastructure to enhance climate mitigation and adaptation as opposed to tactics like “managed retreat?”
7. What are the pros and cons of a tax that creates a national fund for reconstruction after extreme weather events?
8. How feasible is such a tax? Why?
9. What would enhance the political viability of this tax?
10. What are the flaws of the current response to extreme weather events? How will climate change impact the effectiveness of this response?

SEMESTER PROJECT: CASE STUDY OUTLINE DUE

Your case study outline should address the (minimum of) five subheads or questions you’ve selected for your case study. The outline should be three pages double-spaced in a standard 12 pt. font (e.g., Times New Roman, Arial, Calibri) and can be written in paragraph-form or in bullet points.

Group Case #6: Waste Management in New York City, Hong Kong, and Beijing

New York City is one of the many regions in the world that faces waste management challenges. Your team of consultants has been hired by the New York City Department of Sanitation (DSNY) to provide recommendations on improving waste management in New York City. The Department has asked you to consider waste practices in other large cities, such as Beijing and in Hong Kong.

Group K:

1. How are the waste management systems in New York, Beijing, and Hong Kong similar? What underlying issues are common in all three, and what key policies are used?
2. What technologies could be developed to improve waste management in all three of these cities?
3. What performance indicators should be used to measure the effectiveness and efficiency of waste management?
4. How do you manage conflict to create an effective waste management system? How do you provide legitimacy for different groups?
5. How do social values – those regarding waste management, garbage, and wealth – influence attitudes about waste management in New York, Beijing, and Hong Kong?

Group L:

1. What are the main challenges associated with NYC waste management?
2. What current approach is being used?
3. What technologies should New York adopt to improve waste management?
4. Who are the key stakeholders in a city’s waste management process? What are the key political issues in waste management?
5. What equity considerations are relevant in discussing NYC’s waste management issues?

Group Case #7: Mandalay Homes: Building Sustainable Innovation in Residential Construction

Group M:

1. Evaluate the three potential frontiers for expansion and how do they help CEO Dave Everson achieve his goals for the company.
2. What are the benefits of this proposed expansion? What are potential barriers to implementation?

3. How does this direction advance sustainability efforts in the residential construction industry? How might Mandalay Homes' efforts impact the industry?
4. How much financial risk is associated with this proposal?
5. What public-private collaboration or partnerships would be most effective under this proposition?

Group N: Resource Management and Distributed Energy Resources (DERs)

1. As discussed in the case, Mandalay Homes has to balance reductions in energy demand with the energy habits and preferences of its consumers. What are some strategies Mandalay might employ to encourage sustainable behavior from its customers?
 2. How might Mandalay expand its reach to consumers who may not value sustainable buildings?
 3. Explain some of the benefits of Connected Communities outlined in Exhibit 5. Which of the customer benefits should Mandalay or other companies emphasize to promote their sustainable home-building procedures?
 4. Propose new ways for Mandalay to evaluate its suppliers and their sustainability.
 5. The case study mentions that Mandalay may start incorporating deconstruction design into its operation. How might regulators or governments incentivize considerations for material end-of-life?
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Week 10 (November 7): No Class – Election Day

Week 11 (November 14): The Current State of Environmental Degradation: What are Its Causes, and What Strategy can be Used to Develop a Renewable Resource Based Economy?

Reading Assignment:

- Environmentally Sustainable Growth: Chapters 2, 3 and 4

Group A and Group J Blog Discussion: Congestion Pricing is Stuck in New York's Political Traffic

1. What is congestion pricing?
2. What environmental impact will it have directly? What impact does it have on surface traffic?
3. What is the revenue it generates going to be used for?
4. What are alternative uses for this revenue?
5. What impact will congestion pricing have on low-income individuals (positive or negative)?
6. Why has New York's political landscape delayed its implementation?
7. How have COVID-19, inflation, and gas prices influenced attitudes around congestion pricing?
8. How is the LaGuardia renovation mutually beneficial for all parties – both “good politics” and “good policy”?
9. How can congestion pricing become more politically feasible? How could it align with “good politics” in an election year?
10. What improvements should be made to New York's mass transit system?

Group Case #8: Mecycle: A New Way to Recycle

Group O: As MeCycle's Head of Innovation, you are responsible for widening the company's scope and have decided to expand operations into a new county. In this report, you are considering where to implement the program and evaluating possible barriers to expansion, especially in a states without deposit return regulations.

1. What are the pros and cons of MeCycle growing their operations in a state or region without existing deposit return legislation?
2. What educational messaging or marketing strategies can be used to introduce and build the habit of cycling?
3. How can MeCycle incentivize changing consumers' behavior?
4. What partnerships with local or regional organizations (public or private) are needed to successfully implement the program in a new community? What are potential legislative or financial barriers to expansion?
5. Are there any infrastructural or logistical barriers to expanding MeCycle in low-income or underserved communities?

Group P: You are part of a team headed by COO Ainslee Simmonds and Head of Policy Leslea Snyder tasked with evaluating the customer experience with MeCycle. MeCycle held a natural advantage during the pandemic with the availability of contactless bottle redemption. You are expected to propose new ways for MeCycle to continue to evolve in its relationship with customers.

1. It is hard to compete with the convenience of throwing a recyclable item in the trash. Expand on what the case gives as options to make recycling convenient, simple, and consistent for all consumers.
 2. As discussed in the article, it is often unclear where recyclables go or how they are handled after they are placed in a recycling bin. How could MeCycle ensure that recyclables are reliably recycled and communicate the process with consumers?
 3. MeCycle's business model requires connections with the legislative bodies in the markets in which it operates. What are some ways that MeCycle could improve its relationships with legislators and streamline its expansion into new areas?
 4. How might MeCycle work in tandem with waste management organizations? Are there any incentives for waste management organizations to invest in recycling programs?
 5. One barrier to consistent recycling is a lack of awareness about recycling programs. How might MeCycle advertise recycling programs to potential consumers?
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Week 12 (November 21): Public Sector Infrastructure and the Development of the Circular Economy

Reading Assignment:

- Ellen MacArthur Foundation. (March, 2019). [Circular Economy in Cities: Project Guide](#). (on Courseworks)
- Environmentally Sustainable Growth: Chapter 5

Additional Reading:

- The Circular Business Model. (2021) (on Courseworks)

Video Assignment:

- [Circular Economy in Cities](#)
- [Dutch Businesses Work to Test the Concept of a Circular Economy](#)

Group C Blog Discussion: [Jackson Mississippi and America's Infrastructure Crisis](#)

1. What are the political barriers to effective construction and maintenance of vital environmental infrastructure, including water systems?
2. Why do negative perceptions of taxation and government management persist?
3. How do they exacerbate the gap in quality of life between those in different socioeconomic strata?
4. Explain some of the reasons why taxpayers and local governments might be less willing to invest in resources to address long-term needs. Consider the contrasting examples from Mississippi and New York.
5. Describe potential political or technological solutions to the unequal distribution of investment in public infrastructure.

Individual Case #3: Building Sustainability and Circularity at JSW Steel

(Please read and follow the "Action Memo Format" document on Courseworks)

The JSW Group – JSW Steel in particular – is at a pivotal stage of their business, facing both great uncertainties and opportunities. They have instituted a circular economy within their production model, but are considering increasing their capacity to produce through various forms of organic and inorganic growth. However, JSW Steel must consider how to sustainably manage this growth in line with their mission statement – “better today, stronger tomorrow”, or growing the business and contributing to society in an environmentally responsible manner, to protect the future of the next generation. You are the leader of a working group charged by CEO Sajjan Jindal with the task of analyzing the current state of JSW Steel and assess its best future course of action. Please address the following questions in your memo:

1. How is the JSW Group uniquely positioned within its industry to embody the main tenets of a circular production economy?
2. What are the concerns of each team within JSW Steel regarding increasing sustainable and circular operations? Summarize the arguments in favor and against the expansion of sustainability within the organization.
3. Compare and contrast the sustainability implications of organic versus inorganic growth for JSW Steel
4. How have JSW Steels' circular practices reduced Scope 1, 2, and 3 emissions? Which specific policies impact each category of emissions?

Group Case #9: NIO: Battling Tesla with Battery as a Service

You are a consulting team hired by NIO to help increase the company's competitiveness and assess the company's growth strategy, particularly its recently-launched Battery-as-a-Service (BaaS) initiative.

Group Q:

1. In what ways can NIO increase the circularity of its BaaS system while maintaining a competitive price? Is NIO's BaaS appealing to users as it stands? Use the Circular Business Model roadmap to do so, keeping in mind the drawbacks of sustainable business and finance.
2. What public infrastructure is needed to support NIO's BaaS system in new markets around the world? How does this impact the feasibility of NIO's expansion into Europe and North America?
3. How does NIO's Battery as a Service (BaaS) product correlate with changing consumer and firm preferences regarding acquisitions? How does this contrast with Tesla's approach?
4. To what extent can BaaS continue providing NIO an experiential and technological edge in the EV sector? Explore NIO's long-term financial viability based on the advantages and drawbacks of BaaS in the present and future.
5. What are the environmental and economic benefits to consumers who choose NIO's BaaS system instead of fuel-based cars, or Tesla products?

Group R:

1. Draw comparisons between NIO's approach to charging services with Tesla's. In what ways can NIO adapt its BaaS model to remain competitive with Tesla and other EV companies in the sector while advancing environmental sustainability?
2. Discuss possible strategies that could optimize battery swapping, both to increase sustainability and support improved customer experience. Use the Circular Business Model roadmap to do so, keeping in mind the drawbacks of sustainable business and finance.
3. How do public policies supporting environmental sustainability efforts impact NIO's business model? What policies are essential to NIO's success?
4. What benefits does diversification to home design and e-commerce bring to NIO? What is the importance of media attention in expanding sustainability efforts?
5. How might NIO's current operating model in China be adapted to better cater to international markets? What infrastructural changes or technological considerations are needed in order to attract customers around the world to NIO's product?

Week 13 (November 28): Sustainability and Equity

Reading Assignment:

- Sustainability Policy: Hastening the Transition to a Cleaner Economy: Chapter 4 (must purchase)
- The Sustainable City: Chapter 6 (on Courseworks)
- Energy Democracy: Advancing Equity in Clean Energy Solutions: [Introduction](#) (on Courseworks)

Group E Blog Discussion: [Environmental Justice Delayed Has Been Justice Denied](#)

1. Have you witnessed environmental justice issues in your home city or country?

2. Give several examples of environmental justice issues. What makes a situation an environmental justice issue?
3. What do you think are the repercussions of environmental injustice over a prolonged period of time?
4. How do environmental issues disproportionately impact communities with high poverty?
5. Who is responsible for protecting the environment?
6. How should those responsible for protecting people and the environment prioritize addressing localized environmental issues? Is there a way to systematize crisis response? Should it be?

In-Class Video: [Environmental Racism: Last Week Tonight with John Oliver](#)

Group Case #10: The Making of a Public Health Catastrophe: A Step-by-Step Guide to the Flint Water Crisis

Group S: After Flint reconnects to the Detroit water system, the Federal Environmental Protection Agency (EPA) tasks your firm, which specializes in public health, to analyze the lessons learned from the Flint Water Crisis – factors that caused the crisis, as well as policy recommendations to prevent similar catastrophes from occurring in the future.

1. What was the role (positive or negative) of activists or coalition building in the Flint Water Crisis? What strategies were effective or ineffective?
2. How did issues of equity, socioeconomic or demographic factors, impact or worsen the Flint Water Crisis?
3. What private and public interests led the crisis to worsen and ultimately develop as it did?
4. What preventative actions (long and short term) might be taken in order to prevent a similar crisis in the future?
5. How can we hold political officials accountable to the community they serve in cases like this?

Group T: The Federal Environmental Protection Agency (EPA) tasks your firm, which specializes in public health, to analyze the lessons learned from the Flint Water Crisis by outside experts.

1. Compare and contrast the responses to citizen complaints of Miguel Del Toral of the EPA and the ‘experts’ at Flint’s forum of January 13, 2015.
2. Marc Edwards and his team from Virginia Tech were successful in part because of the Coalition’s connections to residents. What is the role of trust in monitoring a community’s environmental health?
3. Miguel Del Toral was brought up on ethics charges for his draft report that was eventually distributed to an investigative journalist. Do you think that there were alternative approaches for Del Toral to bring the situation in Flint to light? What would be your decision if you were in Del Toral’s shoes?
4. Similarly to Del Toral, Dr. Mona Hanna-Attisha decided to publish her research on the effects of Flint’s water. How might a city utilize the expertise of its citizens and workers rather than disregard them?
5. The experts mentioned above conducted their research independently of the government in Flint. How might Flint or other cities implement a system to promote research of its operations? Why might independent research be desirable for municipalities?

Week 14 (December 5): Changing Environmental Politics and Progress Made Toward a Renewable Economy

Reading Assignment:

- Environmentally Sustainable Growth: A Pragmatic Approach: Preface, Chapter 6 and Chapter 7 (on Courseworks)

Group G and Group L Blog Discussion: [The Pace of the Transition to an Environmentally Sustainable Economy](#)

1. Why will the transition to a decarbonized economy not be a “rapid metamorphosis?” Why was this the case even before *EPA v. West Virginia*?
 2. Explain the exponential growth of the renewable energy sector in America and the steps America has taken in the last two decades to increase the production of renewable energy.
 3. A careful, parsimonious approach to the use of physical materials that limits waste will make a production process more efficient and lower priced. Explain the relevance of Total Quality Management (TQM) to sustainability management?
 4. What are some examples of other ways we can make use of waste efficiently?
 5. What steps can be taken to pursue the goals of the environmentally sustainable transition?
 6. How will the SEC’s climate disclosure rule influence the transition to environmental sustainability?
 7. What strategies might make the transition to environmental sustainability more politically feasible?
 8. How can public-private collaboration aid the green transition?
 9. What is the role of sustainable management in the transition to an environmentally sustainable economy?
 10. Why is sustainability management in the private sector particularly important?
 11. What is the role of new technology in the transition to an environmentally sustainable economy? What are some areas where innovation is needed?
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CASE STUDY SEMESTER PROJECT

[Project Deadlines:](#)

1. Submit the name of your organization by [September 12, 2023, at 6:10 pm.](#)
 - a. Include the name of the organization you’d like to focus your case study on (if not maintaining anonymity) and a brief paragraph describing the organization’s background information—sector, mission and vision, location, organization size, and business model.
2. Submit case study outline by [October 31, 2023, at 6:10 pm.](#)
 - a. Your case study outline should address the five subheads you’ve selected for your case study. The outline should be three pages double-spaced in a standard 12 pt.

font (e.g., Times New Roman, Arial, Calibri) and can be written in paragraph-form or in bullet points.

3. Submit the final draft by [December 12, 2023, at 6:10 pm.](#)

Project Overview:

Over the course of the semester, you will be writing your own case study about an organization of your choice (public, private for-profit, and private nonprofit) analyzing its efforts to incorporate environmental sustainability into its organizational structure and practices. With this assignment, you will be addressing the fundamental challenges facing managers in operationalizing sustainability strategies within routine decision-making processes inside organizations. Your case study should identify best and worst practices for organizational management and make reasonable recommendations for integrating sustainability management into the organization. Additionally, your case study should address the applicability of these recommendations to other organizations.

To collect information on the organization, you can conduct key informant interviews or rely on secondary sources (e.g., company website, newspaper articles, magazines, additional website sources, etc.). The organization can remain anonymous but do indicate the company industry (e.g., Major Insurance Company, Major University). You can conduct this study on an organization that you work/have worked for or have another personal or professional connection to. The choice of organization is up to you.

This assignment is an opportunity to reflect on what you've learned throughout the semester and implement your understanding of the challenges to integrating sustainability in an organization and its management practices. Consider the organizational culture and management of the company and how those may serve as either a hindrance to or an avenue for bringing in the function of environmental sustainability.

Your case study should include **at least five** of the boldfaced subheads below and address all questions of the respective sections you choose. Your case study should be **7-9 pages single-spaced** written in a standard 12 pt. font (e.g., Times New Roman, Arial, Calibri). Figures/tables/charts/graphs can be included in the body of the paper or in an appendix, but will not count toward page limit and should be appropriately cited. Citations can be formatted following any style convention of your choice (e.g., MLA, APA, Chicago, etc.) so long as they are consistent throughout.

Assignment Questions:

1. **Background on the Organization:** Sector (public, private for-profit, private nonprofit), mission/market niche, number of staff, revenues/expenses/geography, strategy and/or business model.
2. **Definition of Sustainability in this Organization:**
 - a. Does it include non-environmental factors? - Yes/No
 - i. Non-environmental factors include:

- *Social*: small business mentoring programs on sustainability; increase worker wellbeing through bicycle commuting, free lunch, electric vehicle charging stations;
 - *DEI*: intentional hiring of women and other minority groups;
 - *Reporting*: commitment to transparent disclosure of carbon emissions or other metrics; routine compliance checks;
 - *Safety*: reduce worker injury.
- b. Is it a “standard” definition, or does it include some unusual elements perhaps unique to the organization? Please describe.
 - i. *Standard definition* includes components relating to renewable energy use, emission standards, water usage, waste management, biodiversity, etc.
 - ii. *Unusual elements* may include programs unique to the organization, toxics or resources specific to the organization, equity components, worker safety, employee wellbeing, etc.
- c. Does management address sustainability within the organization only, or does it also consider the impact of its choices on its supply chain and its customers/ stakeholders?
 - i. *Internal organization culture only*; scope of sustainability efforts:
 - Extends to all of the organization,
 - Certain programs/areas,
 - Level of employees.
 - ii. *Considers supply chain management (producers)*, e.g., building better reporting standards, active role in implementing and endorsing industry best practices, acknowledgment of UN’s Sustainable Development Goals (SDGs), developed programs to educate supply chain partners on sustainability.
 - iii. *Customers and stakeholders (demand side)* are informed of sustainability efforts and their role in strategy, organization’s data is accessible. Is there an effort to return manufactured goods for reuse?

3. Leadership:

- a. Does the CEO, CFO, and/or COO support sustainability? - Yes/no; Title of supporter
 - i. How do they demonstrate support or opposition?
 - *Support*: active role in addressing sustainability in press releases, internal memorandums, email announcements, and newsletter updates; sustainability is included in company’s mission statement and/or values, visible on organization’s website, mentioned in public speaking engagements, committed investments, and operational budgets.
 - *Opposition*: lack of acknowledgment, lack of further investment or commitments.

- b. Who leads the sustainability function? - Title of leader(s), e.g., executive director, program managers, scientists/developers, etc.
 - i. How is this sustainability leader perceived?
 - Including: Open to new ideas, approachable, respected by peers, ability to execute sustainability measures, level of authority.
 - ii. What is the sustainability leader's relationship to organizational leadership?
 - Rank in organization's hierarchy.
 - iii. Is the sustainability leader an internal or external hire?
 - *Internal*: name of department/program within the organization.
 - *External*: name of consulting firm/contractor.

4. Organization Structure and Capacity:

- a. In what department within the organization does the function "sit"? Are roles spread out through multiple departments?
 - i. Name of department(s) and/or program(s).
- b. What kind of people work on it?
 - i. E.g., scientists, engineers, analysts, communications/PR, finance people.
- c. What is the sustainability team expected to do, and what is their main goal?
 - i. Activities may include:
 - launch PR/marketing campaigns,
 - develop new technologies to advance sustainability,
 - measure natural resource consumption,
 - create annual sustainability reports,
 - incremental investments,
 - improve organization's brand/image,
 - ensure sustainable operations and supply chains.

5. Strategy and Metrics: What are the organization's sustainability goals?

- a. How is sustainability measured in this organization?
 - i. Identify and track sustainability key performance indicators (set to appropriate benchmarks);
 - ii. Resource use and emissions targets (e.g., water consumption, greenhouse gas emissions, renewable energy use);
 - iii. Periodic assessment of sustainability education;
 - iv. Changes in funding/investments attributed to sustainability efforts;
 - v. Growing number of staff in sustainability team;
 - vi. Changes in internal operations (reduced waste and paper use, recycling, etc.).
- b. How important are their sustainability goals to the overall organizational strategy?
 - i. Potential impacts on supply chain production, market pricing, consumer demand, etc.

- c. Is there a sustainability component in employee performance reviews?
 - i. E.g., employees are surveyed on sustainability efforts within the organization.
- d. Does management compensation depend on achieving any sustainability targets?
 - Yes, no, not applicable
- e. What sustainability outputs and outcomes has the organization produced, i.e., progress thus far? How does this compare with strategic goals?
 - i. *Outputs*: any measurable targets (e.g., data, statistics).
 - ii. *Outcomes*: timelines of progress made toward sustainability goals.
 - iii. Comparison with strategic goals requires time commitment and comparable indicators.
- f. Are there examples of strategic choices that the organization has taken (or not taken) due to the recommendations of the sustainability function?
 - i. E.g., update emissions and resource use targets, use third-party sustainability certification, implement routine monitoring, etc.
- g. How is a successful sustainability program defined within the organization?
 - i. E.g., achieving a more environmentally-conscious culture internally, meeting objectives in overall sustainability strategy, achieving a certain amount of funding, creating an overall sustainability program, etc.

6. Relations with Suppliers and Partners:

- a. Do they share sustainability goals and work and if so, how?
 - i. Organization incorporates suppliers and partners into sustainability goals.
 - o Detail to what extent, i.e., working with suppliers with sustainable-practices accreditation and/or aiding suppliers to receive accreditation.
 - ii. Do they require suppliers or partners to meet certain sustainability requirements? If so, how do they ensure compliance?

7. Resources – Capital, Operating, and Personnel for Sustainability:

- a. How much staffing and funding is allocated to the sustainability function?
 - i. Number of staff in sustainability team (or across departments) and monetary amount.
 - ii. Percentage of the total budget allocated to sustainability efforts, and is it adequate?
 - iii. Are any sustainability efforts underfunded? Would sustainability efforts improve with more funding?
- b. Is there capital funding for sustainability-related equipment and other needs?
 - i. Yes/no; amount, time period covered, and list other items.
 - ii. Is it sufficient? Yes/No.
- c. Are the funds allocated to sustainability efforts increasing or decreasing?
 - i. Funding increases or decreases when comparing across annual budgets?

8. Internal Perceptions of Sustainability:

- a. How is sustainability perceived within the organization?
 - i. Important, neutral, not important, not sure.
- b. Is it considered a success? Central? Fringe?
 - i. Yes; central to the organization's mission,
 - ii. No; not well known within the whole organization,
 - iii. In progress; sustainability is acknowledged in some of the organization's activities.
- c. Is sustainability an established program or a temporary campaign?
 - i. Sustainability is established within the organization, only part of a pilot program/temporary campaign.
- d. How does sustainability compare to the success of other programs in the organization?
 - i. Program more effective than other initiatives, receives greater interest.
- e. Do employees perceive sustainability to be an important part of the organization's success? In what areas of sustainability has the company made valuable progress?
 - i. Important, neutral, not important, not sure.
 - ii. Varied responses for progress: objectives are being met within a timely fashion within the organization's overall sustainability strategy and goal.
- f. Is sustainability included in the employee onboarding process?
 - i. New employees are trained in the history of sustainability efforts in organization, current initiatives, and future goals.

9. Importance of Sustainability:

- a. Is sustainability an integral part of the organization? Yes / No.
- b. Why or why not?
 - i. Varied responses: lack of interest or sustainability knowledge, limited funding, technology availability, employee awareness, no existing sustainability program, consumer pressure, investor support, etc.
- c. What contributed to the success or failure to make sustainability an organizational routine? (according to insiders, according to outside analysts and observers).
 - i. Varied responses that may include institutional, technical or educational challenges/successes.
 - o E.g., used SMART goals, organization-wide support, routine monitoring and objective evaluation, appropriate investment, resulted in loss/profit, etc.

10. The Future of Sustainability in the Organization:

- a. What would be needed to improve the sustainability performance of this organization?
 - i. Education on sustainability, identify Key Performance Indicators (KPIs), changing internal culture, increase capital funding, increase staff and resources of sustainability team in the organization, accelerate

implementation of sustainability efforts, enforcement of sustainable practices, increase data transparency, produce meaningful sustainability reports, consider societal consequences in the organization's activities, etc.

- b. Are any of those steps underway, under discussion, or planned?
 - i. Timeline of efforts.
- c. What is the probable future of the sustainability function in this organization?
 - i. Varied responses: good foundation to continue growth into all areas of organization, more work needs to be done to improve sustainability, sustainability efforts will subside, sustainability efforts are yet to be considered.

Sustainability Management

PS 4100 Section 002, Fall 2023

Time: Mondays 6:10-8:00 PM
Location: URIS HALL RM. 303

Professor Fernando Ortiz
e-mail: fo2207@columbia.edu

Professor Franco Fubini
e-mail: ff2492@columbia.edu

Course Description

The introductory course will provide an overview of sustainability concepts and practices and how they are applied in real-world contexts. This course will begin by clearly defining what sustainability management is and determining if a sustainable economy is actually feasible. Students will learn to connect environmental protection to organizational management by exploring the technical, financial, managerial, and political challenges of effectively managing a sustainable environment and economy. This course is taught in a case-based format and will seek to help students learn the basics of management, environmental policy and sustainability economics.

Each week students will read one or two cases in management and/or sustainability, and some background material designed to help answer the questions posed at the end of each case exercise. The cases always pose practical issues for decision makers to address—but issues that are best addressed with a firm grounding in the literature of management and sustainability.

The literature and case material focus on lessons learned in government, nonprofits and the private sector. The course will emphasize management in public and nonprofit organizations and the role of public policy in sustainability, but it will also explore how these two sectors interact with private interests to promote sustainable practices. Students will present a formal briefing to the class on a particular case and write three two-page memos according to a specified format.

This course satisfies the program's integrative sustainability management. Integrative courses give students an understanding of the elements of sustainability by demonstrating the complex interactions between natural and social systems which sustainability practitioners must always consider and the different ways in which "sustainability" is understood, both as productivity and as a part of corporate social responsibility or global citizenship.

Course Objectives

Sustainability management matters because we only have one planet, and we must learn how to manage our organizations in a way that ensures that our planet is maintained. The course is designed to introduce you to the field of sustainability management. This is not an academic course that reviews the literature of the field and discusses how scholars think about the management of organizations that are

environmentally sound. It is a practical course organized around the core concepts of management and the core concepts of sustainability. Students will gain the ability to apply their understanding of the basic principles and theories of sustainability management as a frame for strategic planning, and the management of people, finances and operations toward sustainability goals. Students will work collaboratively to develop strategies promoting wide ranging sustainable solutions, and through a group briefing, will hone their skills to effectively communicate these plans in a professional environment.

Schedule:

Week 1 (September 11): Introduction to Management and Public Management, and Sustainability Management (FO)

MANAGEMENT

Week 2 (September 18): Internal Organizational Management: People, Work, and Money (FF)
Lecture + Class Activity

9/22 Red Hook Farms Field Trip: Friday @2PM (Brooklyn)

Week 3 (September 25): External Organizational Management: Strategy, Communication, and Information (FO)
Lecture + Group Presentation

Week 4 (October 2): Management in 21st Century: Sustainability, Outsourcing, Supply Chains, Network Management and Public-Private Partnerships (FF)
Lecture + Group Presentation

10/09 Freshkills Park Field Trip: Monday @10AM (Staten Island)

Week 5 (October 9): The Role of Government in Promoting Sustainability (FO)
Lecture + Class Activity

STRATEGIES, TOOL, SYSTEMS

Week 6 (October 16): Sustainable Business and Finance (FF)
Lecture + Class Activity

Week 7 (October 23): Sustainability Metrics, Management Innovation and Quality Management (FO)
Lecture + Group Presentation

10/28 Toxic Tour Field Trip: Saturday @11AM (The Bronx)

Week 8 (October 30): Corporate Sustainability Reporting & Sustainability Plans (FO)
Lecture + Class Activity

Week 9 (November 6): Veterans Day--- No Class

SUSTAINABILITY THEMES

Week 10 (November 13): Sustainability Leadership Panel

Week 11 (November 20): Sustainable Cities/Urban Systems: Energy, Transportation, Waste (FO)
Lecture + Class Activity

11/17 Ravenswood Facility Field Trip: Friday @10AM (Queens)

Week 12 (November 27): Sustainable Food Supply (FF)
Lecture + Group Presentation

12/01 Mother Clara Hale Bus Depot Field Trip: Friday @10AM (Manhattan)

Week 13 (December 4): Sustainability and Equity (FO)
Lecture + Group Presentation

Week 14 (December 11): The Circular Economy (FF)
Lecture + Group Presentation

Required Readings:

All required readings will be in the corresponding Folder on Canvas categorized per Week/Theme

Method of Evaluation

Grading Policy:

1. **Individual Case Memos (3) - 30%**
2. **Case Study Final - 40%**
3. **Group Case Presentation & Memo - 20%**
4. **Attendance & Class participation- 10%**

ALL ASSIGNMENTS MUST BE HANDED IN ON TIME. ANY LATE SUBMISSIONS RECEIVE AN AUTOMATIC REDUCTION OF ONE LETTER GRADE. IF AN ASSIGNMENT IS AN OUR LATE OR A YEAR LATE, THE PENALTY IS THE SAME.

Individual Case Memos:

Students will be asked to write three memos based on an assigned topic and reading. Case memos should be no more than 2 pages in length and will be graded out of 100 points using the below rubric:
Spelling and Grammar: 20 points, Adherence to Format Guidelines: 30 points, Answers to assigned questions: 50 point total (10 to 12.5 points per question)

Case Study Final:

Over the course of the semester, you will be writing your own case study about an organization of your choice (public, private for-profit, private non-profit, government) analyzing its efforts to incorporate environmental sustainability into its organizational structure and practices. With this assignment, you

will be addressing the fundamental challenges facing managers in operationalizing sustainability strategies within routine decision-making processes inside organizations. Your case study should identify best and worst practices for organizational management and make reasonable recommendations for integrating sustainability management into the organization. Additionally, your case study should address the applicability of these recommendations to other organizations.

Your case study should be **7-9 pages single-spaced** written in a standard 12 pt. font (Times New Roman, Arial, Calibri).

Group Case Presentation & Memo:

There will be 5-6 case studies assigned and two groups assigned to each case study. Groups will be asked to present on the assigned week their assigned case study. The group memo should be no more than 3 pages in length. The Group should have an accompanying PowerPoint Presentation and should be no longer than 10 minutes in length.

Memo: Spelling and Grammar: 10 points, Adherence to Format Guidelines: 15 points, Answers to assigned questions: 50 point total (5 points per question)

Presentation: Spelling and Grammar: 10 points, Adherence to Format Guidelines: 15 points, Answers to assigned questions: 50 point total (5 points per question)

Group Roles:

1. Group Manager (1 member)
 - Develops and submits work plan detailing group responsibilities, outputs and schedules
 - Coordinates the group's work
2. Oral Presentation Team (2 members)
 - Develops presentation materials
 - Presents 10 minute in-class briefing
3. Written Report Team (2 members)
 - Outlines, researches and writes required memo

Group Process:

1. *Each student will have **one** group project to complete.* Groups will be assigned randomly in the first class session, and one person will be assigned the role of group manager. Students that add the course late will be added to an existing group. Groups will consist of 5 members.
2. Group members are responsible for setting meetings and identifying roles and responsibilities.
3. Group manager will submit a work plan two weeks prior to presentation, outlining each person's role and a timeline for completed activities.
4. Group manager will email PowerPoint presentations by 9am on the day of the presentation. The PowerPoint should contain no more than 5-6 slides.
5. Two members will present and the other two members will write the memo.

Attendance and Class Participation:

Thoughtful participation in weekly class discussions is required of each student. Students are expected to attend all class meetings in-person unless granted permission by the instructor prior to class. Students are permitted one-absence.

Extra Credit:

Throughout the course there is 5 scheduled field trips. Students can submit a brief two-page memo after attending each tour for 2.5pts each. Students cannot submit more than two-memos for a total of 5pts of extra credit.

Field Trip Memos can be submitted the week following the field trip or at the end of the course. If you must miss a class, it is suggested you attend a field trip and submit a memo to make up for attendance.

Week 1: September 11th: Introduction to Management, Public Management & Sustainability Management (FO)

Lecture + Overview of Memo Drafting, Group Presentations, Final & Field Trips

Reading Assignment:

- Management Fundamentals: Chapters 1 and 2

Communication Skills: Memo writing and Briefings

Assignment Due: None

Week 2: September 18th: Internal Organizational Management: People, Work, Money and Information (FF)

Lecture + Class Activity

Reading Assignment:

- How to Quantify Sustainability Impact on your Bottom Line (pdf)
- Talk to your CFO About Sustainability (pdf)
- Understanding Organizational Structures (pdf)

Assignment Due: N/A

Week 3: September 25th: External Organizational Management: Strategy and Communications (FO)

Lecture + Group Presentations #1

Reading Assignment:

- Management Fundamentals: Chapters 10 and 11

Assignment Due:

- Group Case Presentation & Memo: Transportation/EV Charging
-

Week 4: October 2nd: Management in the 21st Century: Sustainability, Outsourcing, Supply Chains, Network Management, and Public-Private Partnerships (FF)

Lecture + Group Presentations #2

Reading Assignment:

- More Sustainable Supply Chain (pdf)

Assignment Due:

- Group Case Presentation & Memo: Waste; Organics
-

Week 5: October 9th: The Role of Government in Promoting Sustainability (FO)

Lecture + Guest Speaker

Reading Assignment:

- NYS Scoping Plan 2022: Climate Plan (Executive Summary)
- PlaNYC: Getting Sustainability Done report
 - <https://climate.cityofnewyork.us/initiatives/planyc-getting-sustainability-done/>

Guest Speaker: TBD

Assignment Due:

- Memo #1: Greenwave
 - Case Study Final Topics Due
-

STRATEGY, SYSTEMS, TOOLS

Week 6: October 16th: Sustainable Business and Finance (FF)

Lecture + Class Activity

Reading Assignment:

- Hybrid Organizations Organizational Dynamics (pdf)
- The Sustainable Economy (pdf)

Assignment Due: N/A

Week 7: October 23rd: Sustainability Metrics, Management Innovation, and Quality Management (FO)

Lecture + Group Presentations #3:

Reading Assignment:

- Management Fundamentals Chapter 6 and 12

Assignment Due:

- Group Presentation & Memo: Energy
-

Week 8: October 30th: Corporate Sustainability Reporting & Sustainability Plans (FO)

Lecture + Class Activity

Reading Assignment:

- Patagonia 2021 B-Corp Report
- Coca-Cola Company 2022 Business and Sustainability Report

Assignment Due:

- MEMO #2 Due: Patagonia
 - Case Study Final Outlines Due
-

Week 9: November 6th: Veterans Day- OFF

Week 10: November 13th: Sustainability Leadership Panel (FO)

Panelist:

- **Henry Obispo; Founder; Reborn Farms**
- **Paul Lipson; Principal; Barretto Bay Strategies**
- **Christopher Rice; Senior Advisor for Environmental Justice at the Mayor's Office of Climate and Environmental Justice (MOCEJ)**
- **Aditi Desai; Voltpost**

Week 11: November 20th: Sustainable Urban Systems/Cities (FO)

Guest Speaker: Wil Fisher; External Affairs Manager at Rise Light & Power

Reading Assignment:

- Harlem River Watershed and Natural Resources Management Plan for the Bronx
 - https://www.nycgovparks.org/pagefiles/155/FINAL-HR-Wshed-Plan-spread_5fc54e9b16626.pdf
- Renewable Rikers Plan
 - <https://rpa.org/work/reports/renewable-energy-rikers-island>
- Making Offshore Wind Transmission Work for Communities
 - <https://rpa.org/work/reports/offshore-wind-transmission>

Assignment Due:

- **MEMO #3 Due: Offshore Wind**

Week 12: November 27th: Sustainability Food Supply (FF)

Lecture + Group Presentations #4

Reading Assignment:

- Sustainable Food Systems (FAO-PDF)
- List of articles

Assignment Due:

- Group Case Presentation & Memo: Meat
-

Week 13: December 4th: Sustainability & Equity (FO)

Lecture + Group Presentations #5 + Guest Speakers

Guest Speakers:

- **South Bronx Unite; Mychal Johnson/Arif Ullah**
- **WE ACT; Sonal Jessel**

Reading Assignment:

- Dirty Energy, Big Money Report; PEAK Coalition
 - <https://www.peakcoalition.org/>
- Mott Haven-Port Morris Waterfront Plan
 - <https://www.southbronxunite.org/mott-havenport-morris-waterfront-plan>
- Mapping Heat Project: South Bronx and Northern Manhattan
 - <https://www.southbronxunite.org/studies-collaborations>
- E. 125th Street Community Vision Plan
 - <https://www.weact.org/public/east-125th-street-community-visioning-action-plan.pdf>

Assignment Due:

- Group Presentation & Memo: Equity
-

Week 14: December 11th: Circular Economy (FF)

Lecture + Group Presentations #6

Reading Assignment:

- Circular Business Models (pdf)

Assignment Due:

- Group Presentation & Memo: Circular Sneakers

CASE STUDY SEMESTER PROJECT

Project Deadlines:

1. Submit the name of your organization by **October 9th at 6:00 pm.**
 0. Include name and a brief paragraph describing the organization's background information - sector, mission and vision, location, organization size, and business model.
2. Submit case study outline by **October 30th at 6:00pm.**
 0. The outline should address the five subheads you've selected for your case study. The outline should be three pages double-spaced in a standard 12 pt. Font (Times New Roman, Arial, Calibri).
3. Submit the final draft by **December 13th at 6:10 pm.**

Project Overview:

Over the course of the semester, you will be writing your own case study about an organization of your choice (public, private for-profit, private non-profit, government) analyzing its efforts to incorporate environmental sustainability into its organizational structure and practices. With this assignment, you will be addressing the fundamental challenges facing managers in operationalizing sustainability strategies within routine decision-making processes inside organizations. Your case study should identify best and worst practices for organizational management and make reasonable recommendations for integrating sustainability management into the organization. Additionally, your case study should address the applicability of these recommendations to other organizations.

To collect information on the organization, you can conduct key informant interviews or rely on secondary sources (e.g, company website, newspaper articles, magazines, additional website sources, etc.) The organization can remain anonymous but do indicate the company industry (e.g., Major Insurance Company, Major University). You can conduct this study on an organization that you work/have worked for, or have another personal or professional connection to. The choice of organization is up to you.

This assignment is an opportunity to reflect on what you're learning throughout the semester and implement your understanding of the challenges to integrating sustainability in an organization and its management practices. Consider the organizational culture and management of the company and how those may serve as either a hindrance to or an avenue for bringing in the function of environmental sustainability.

Your case study should include **at least five** of the boldfaced subheads below and address all questions of the respective sections you choose. Your case study should be **7-9 pages single-spaced** written in a standard 12 pt. font (Times New Roman, Arial, Calibri).

Assignment Questions:

1. **Background on the organization:** Sector (public, private for-profit, private nonprofit), mission/market niche, number of staff, revenues/expenses/geography, strategy and/or business model.
2. **Definition of sustainability in this organization:**
 0. Does it include non-environmental factors? - Yes/No
 0. Non-environmental factors include:
 0. **Social:** small business mentoring programs on sustainability; increase worker wellbeing through bicycle commuting, free lunch, electric vehicle charging stations;
 1. **DEI:** intentional hiring of women and other minority groups;
 2. **Reporting:** commitment to transparent disclosure of carbon emissions or other metrics; routine compliance checks;
 3. **Safety:** reduce worker injury
 0. Is it a “standard” definition, or does it include some unusual elements perhaps unique to the organization? Please describe.
 0. **Standard definition** includes components relating to renewable energy use, emission standards, water usage, waste management, biodiversity, etc.
 1. **Unusual elements** may include programs unique to the organization, toxics or resources specific to the organization, equity components, worker safety, employee wellbeing, etc.
 0. Does management address sustainability within the organization only, or does it also consider the impact of its choices on its supply chain and its customers/stakeholders?
 0. **Internal organization culture only;** scope of sustainability efforts:
 0. extends to all of the organization,
 1. certain programs/areas,
 2. level of employees
 1. **Considers supply chain management** (producers), e.g. building better reporting standards, active role in implementing and endorsing industry best practices, acknowledgement of UN’s Sustainable Development Goals (SDGs), developed programs to educate supply chain partners on sustainability
 2. **Customers and stakeholders** (demand side) are informed of sustainability efforts and their role in strategy, organization’s data is accessible. Is there an effort to return manufactured goods for reuse?
3. **Leadership:**
 0. Does the CEO, CFO, and/or COO support sustainability? - Yes/no; Title of supporter

- 0. How do they demonstrate support or opposition?
 - 0. **Support:** active role in addressing sustainability in press releases, internal memorandums, email announcements, newsletter updates; sustainability is included in company's mission statement and/or values, visible in organization's website, mentioned in public speaking engagements, committed investments and operational budgets.
 - 1. **Opposition:** lack of acknowledgement, lack further investment or commitments

- 0. Who leads the sustainability function? - Title of leader(s), e.g. executive director, program managers, scientists/developers, etc.
 - 0. How is this sustainability leader perceived?
 - 0. Including: Open to new ideas, approachable, respected by peers, ability to execute sustainability measures, level of authority
 - 1. What is the sustainability leader's relationship to organizational leadership?
 - 0. Rank in organization's hierarchy
 - 2. Is the sustainability leader an internal or external hire?
 - 0. **Internal:** name of department/program within the organization
 - 1. **External:** name of consulting firm/contractor

- 4. **Organization structure and capacity:**
 - 0. In what department within the organization does the function "sit"? Are roles spread out through multiple departments?
 - 0. Name of department(s) and/or program(s)

 - 0. What kind of people work on it?
 - 0. E.g. Scientists, engineers, analysts, communications/PR, finance people

 - 0. What is the sustainability team expected to do and what is their main goal?
 - 0. Activities may include:
 - 0. launch PR/marketing campaigns
 - 1. develop new technologies to advance sustainability
 - 2. measure natural resource consumption
 - 3. create annual sustainability reports
 - 4. incremental investments
 - 5. improve organization's brand/image
 - 6. Ensure sustainable operations and supply chains?

- 5. **Strategy & Metrics:** What are the organization's sustainability goals?
 - 0. How is sustainability measured in this organization?

- 0. Identify and track sustainability key performance indicators (set to appropriate benchmarks)
 - 1. Resource use and emissions targets (e.g. water consumption, greenhouse gas emissions, renewable energy use)
 - 2. Periodic assessment of sustainability education
 - 3. Changes in funding/investments attributed to sustainability efforts
 - 4. Growing number of staff in sustainability team
 - 5. Changes in internal operations (reduced waste and paper use, recycling, etc.)

- 0. How important is the overall organizational strategy?
 - 0. Potential impacts on supply chain production, market pricing, consumer demand, etc.

- 0. Is there a sustainability component in employee performance reviews?
 - 0. e.g. employees are surveyed on sustainability efforts within organization

- 0. Does management compensation depend on achieving any sustainability targets? Yes, no, not applicable

- 0. What sustainability outputs and outcomes has the organization produced i.e. progress thus far? How does this compare with strategic goals?
 - 0. Outputs: any measurable targets (e.g. data, statistics)
 - 1. Outcomes: timelines of progress made towards sustainability goals
 - 2. Comparison with strategic goals requires time commitment and comparable indicators

- 0. Are there examples of strategic choices that the organization has taken (or not taken) due to the recommendations of the sustainability function?
 - 0. e.g. Update emissions and resource use targets, use third-party sustainability certification, implement routine monitoring, etc.

- 0. How is a successful sustainability program defined within the organization?
 - 0. e.g. Achieve a more environmentally-conscious culture internally, meeting objectives in overall sustainability strategy, achieve a certain amount of funding, creating an overall sustainability program, etc.

- 6. Relations with suppliers and partners:**
 - 0. Do they share sustainability goals and work and if so, how?
 - 0. Organization incorporates suppliers and partners into sustainability goals,
 - 0. detail to what extent, i.e. working with suppliers with sustainable-practices accreditation and/or aiding suppliers to receive accreditation

1. Do they require suppliers or partners to meet certain sustainability requirements? If so, how do they ensure compliance?

7. Resources: Capital, operating, personnel for sustainability

0. How much staffing and funding is allocated to the sustainability function?
 0. Number of staff in sustainability team (or across departments) and monetary amount
 1. Percentage of the total budget allocated to sustainability efforts and is it adequate?
 2. Are any sustainability efforts underfunded? Would sustainability efforts improve with more funding?
0. Is there capital funding for sustainability-related equipment and other needs? Yes/no; amount, time period covered, and list other items
 0. Is it sufficient? Yes/No
0. Are the funds allocated to sustainability efforts increasing or decreasing?
 0. Funding increases or decreases when comparing across annual budgets

8. Internal perceptions of sustainability:

0. How is sustainability perceived within the organization?
 0. Important, neutral, not important, not sure
0. Is it considered a success? Central? Fringe?
 0. Yes; central to the organization's mission
 1. No; not well known within the whole organization,
 2. In progress; sustainability is acknowledged in some of the organization's activities
0. Is sustainability an established program or temporary campaign?
 0. Sustainability is established within the organization, only part of a pilot program, temporary campaign
0. How does sustainability compare to the success of other programs in the organization?
 0. Program more effective than other initiatives, receives greater interest
0. Do employees perceive sustainability to be an important part of the organization's success? In what areas of sustainability has the company made valuable progress?
 0. important, neutral, not important, not sure
 1. varied responses for progress: objectives are being met within a timely fashion within the organization's overall sustainability strategy and goal

- 0. Is sustainability included in the employee on-boarding process?
 - 0. new employees are trained in history of sustainability efforts in organization, current initiatives, and future goals

9. Importance of sustainability:

- 0. Is sustainability an integral part of the organization? Yes / No
- 0. Why or why not?
 - 0. Varied responses: lack of interest or sustainability knowledge, limited funding, technology availability, employee awareness, no existing sustainability program, consumer pressure, investor support, etc.
- 0. What contributed to the success or failure to make sustainability an organizational routine? (according to insiders, according to outside analysts and observers)
 - 0. Varied responses that may include institutional, technical or educational challenges/successes
 - 0. examples: used SMART goals, organization-wide support, routine monitoring and objective evaluation, appropriate investment, resulted in loss/profit, etc.

10. The future of sustainability in the organization:

- 0. What would be needed to improve the sustainability performance of this organization?
 - 0. Education on sustainability, identify Key Performance Indicators (KPIs), changing internal culture, increase capital funding, increase staff and resources of sustainability team in organization, accelerate implementation of sustainability efforts, enforcement of sustainable practices, increase data transparency, produce meaningful sustainability reports, consider societal consequences in the organization's activities, etc.
- 0. Are any of those steps underway, under discussion or planned?
 - 0. Timeline of efforts
- 0. What is the probable future of the sustainability function in this organization?
 - 0. Varied responses: good foundation to continue growth into all areas of organization, more work needs to be done to improve sustainability, sustainability efforts will subside, sustainability efforts are yet to be considered

School Policies and Expectations:

Accessibility Statement – I want you to succeed in this course. Contact disability@columbia.edu for learning accommodations.

Names/Pronouns – You deserve to be addressed in a manner that reflects your identity. You are welcome to tell me your pronoun(s) and/or name (if different from University records) at any time, either in person or via email.

Discrimination – We embrace the diversity of gender, gender identity & expression, sex, sexual orientation, race, ethnicity, national origin, age, religion, disability status, family status, socioeconomic background, and other visible and non-visible identities. Columbia University does not tolerate unlawful discrimination, discriminatory harassment, sexual assault, domestic violence, dating violence, stalking, or sexual exploitation and all such conduct is forbidden by Columbia University Policy.

Duty to Report – You deserve a University community free from discrimination, harassment, and gender-based misconduct including sexual harassment, sexual assault, domestic and dating violence, stalking, and sexual exploitation. It is therefore University policy to require Columbia faculty and staff to report to EOAA any instance or allegation of prohibited conduct involving any undergraduate or any graduate student that is disclosed to, observed by, or otherwise known to that employee. This requirement to report is in place to help ensure that students are provided appropriate resources and to allow the University to mitigate harm to our community.

Confidential Resources - There are confidential resources on campus who do not have a Duty to Report, including:

- Sexual Violence Response & Rape Crisis/Anti-Violence Support Center (SVR)
- Ombuds Office
- Medical Services
- University Counseling and Psychological Services
- University Pastoral Counseling
- Columbia Office of Disability Services

University employees working in a confidential capacity will not report information shared with them.

Inclusion - In the M.S. in Sustainability Management program, faculty and staff are committed to the creation and maintenance of “inclusive learning” spaces – classrooms and other places of learning where you will be treated with respect and dignity, and where all individuals are provided equitable opportunity to participate, contribute, and succeed.

In our Sustainability Management K4100 classroom, all students are welcome regardless of race/ethnicity, gender identities, gender expressions, sexual orientation, socio-economic status, age,

disabilities, religion, regional background, Veteran status, citizenship status, nationality and other diverse identities that we each bring to class.

Academic Integrity

The School of Continuing Education does not tolerate cheating and/or plagiarism in any form. Those students who violate the Code of Academic and Professional Conduct will be subject to the Dean's Disciplinary Procedures. The Code of Academic and Professional Conduct can be viewed online:

<http://ce.columbia.edu/node/217>

Please familiarize yourself with the proper methods of citation and attribution. The School provides some useful resources online; we strongly encourage you to familiarize yourself with these various styles before conducting your research:

<http://library.columbia.edu/help/howto/endnote.html>

Violations of the Code of Academic and Professional Conduct will be reported to the Associate Dean for Student Affairs.

Accessibility Statement

Columbia is committed to providing equal access to qualified students with documented disabilities. A student's disability status and reasonable accommodations are individually determined based upon disability documentation and related information gathered through the intake process. For more information regarding this service, please visit the University's Health Services website:

<http://health.columbia.edu/services/ods/support>

Sustainability Management (SUMAPS4100)

Fall 2023

Time: Mondays, 6:10 pm - 8:00 pm

Location: 601 Sherman Fairchild Life Sciences Building

Instructors:

Wendy Hapgood wendy.h@columbia.edu

Brian Kavanagh bpk2115@columbia.edu

Course Associates:

Zach Russell zrr2002@columbia.edu

Felix Hinderthur ffh2110@columbia.edu

Office Hours:

Our time is flexible. As such, the best way to set up an appointment with Professor Hapgood, Professor Kavanagh, or Course Associates Zach Russell and Felix Hinderthur, is by email.

Course Objectives:

Sustainability management matters because we only have one planet (there is no Planet B!) and we must learn how to manage our organizations and economies in a way that ensures that our planet is sustainable. The course is designed to introduce you to the field of sustainability management. This is not an academic course that reviews the literature of the field and discusses how scholars think about the management of organizations that are environmentally sound. It is a practical, professional course organized around the core concepts of management and the core concepts of sustainability.

This section also includes non-mandatory class field trips to recycling/water treatment facilities in New York City, with students experiencing first-hand some of the practical challenges faced by cities striving to become more sustainable.

We will read case studies in management and sustainability along with background materials designed to help you answer questions posed at the end of each case exercise. The cases pose practical issues for sustainability managers and leaders to address—leaning on their firm grounding in the literature of management and sustainability.

The literature and case materials we will study this semester are based on lessons learned in government, nonprofits, and the private sector. Professor Hapgood has worked in all three sectors across her career, with a focus on the private sector (finance) and nonprofit management. She currently is the co-founder and Chief Operating Officer of [Wild Tomorrow](#), a nonprofit working to protect and restore habitat for threatened biodiversity in southern Africa.

Professor Kavanagh has served in the State Legislature for 17 years and previously worked in policy and management positions in the New York City Mayor's Office and as an attorney in private practice. He has been a leading advocate in enacting and implementing the Climate Leadership and Community Protection Act, the All-Electric Building Act, statewide extended producer responsibility and recycling

initiatives, and legislation to prevent exposure to toxins. Representing Lower Manhattan, he has facilitated community engagement and oversight for clean-up of toxic sites and resiliency efforts.

Your class is your new sustainability community. We are committed to providing a collaborative, inclusive, and supportive learning environment for all students and look forward to learning from you, and together with each other, this Fall.

Evaluation and Assignments:

In this course, assessment consists of two individual case memos, a group assignment and presentation, a case study project focusing on an organization of your choice, and class and online discussion participation, weighted as follows:

- Individual Case Memo #1 - 15%
- Individual Case Memo #2 - 20%
- Group Case Presentation and Memo - 20%
- Class and Discussion Participation - 10%
- Case Study Semester Project - 35%

Individual Case Memos: You will also write two two-page individual case memos according to a specified format ([see “Action Memo Format” document on Courseworks](#)). These memos will be due by 6:10 PM on the due date via upload to the Assignments section on Canvas. The syllabus includes a schedule for each assignment.

Group Process: For the group assignment, you will be assigned to a team that will present a briefing in class, detailing your group’s creative solution to a sustainability problem, or taking on an assigned position for a particular case, for which another team may present a differing view. Groups and case questions will be assigned in Week 3, with students submitting preferences for topics of interest.

- Each student will have one group project to complete an assigned case study, which includes a 1-2 page action memo and a 8-10 minute PowerPoint presentation in class with 10 minutes Q&A.
- Groups will be assigned at the start of the semester based on student preferences (you will be given the opportunity to indicate your top preferences for the group case topic). One person will be assigned the role of group manager. Students that add the course late will be added to an existing group. Groups will consist of 4-5 members.
- Group members are responsible for setting meetings and identifying roles and responsibilities.
- The group manager will submit a work plan to the Course Associates at least two weeks before the presentation, outlining each person’s role and a timeline for completed activities.
- The group manager will email the PowerPoint presentation to the Course Associates and the Professors by 9am on the day of the presentation.
- One person in the group will submit the written memo via Canvas (also due 9am the day of class)
- Both Groups A and B will give a 20-minute briefing (8 to 10-minute presentation and 10-minute Q&A) at the start of class on the assigned date. Groups may have two (or more presenters) who will deliver the briefing for each group.

Class and Discussion Participation: Each week we will explore a discussion question based on one of the assigned readings. Students are expected to participate in the weekly discussion topic by submitting your reflections on the questions online in Courseworks (before class) and also voicing your views during

class. Your assessed Class Participation score also includes attendance. Students are expected to notify the Professors ahead of class for planned absences.

Case Study Semester Project: The process for the semester project is detailed at the end of this syllabus. You will write your own case study on sustainability management. This assignment is due on [December 15th](#).

*** All assignments must be submitted on time. Any late submissions will receive a reduction of one-half letter grade. ***

Core Texts:

Across the semester, we will be reading selected chapters from several core texts. The syllabus will outline the required chapters week-by-week. We encourage you to read the full texts across the semester.

- Cohen, S., & Dong, G. (2021). *The Sustainable City (2nd Edition)*. Columbia University Press.
- Cohen, S., & Eimicke, W. B. (2020). *Management Fundamentals*. Columbia University Press.
- Griffith, S. (2021). *Electrify: An Optimist's Playbook for Our Clean Energy Future*. MIT Press.
- Hawken, P. (2021). *Regeneration: Ending the Climate Crisis in One Generation*. Penguin Books.
- Raworth, K. (2017). *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Random House Business Books.

Required Readings:

There are weekly required readings from the core texts plus news stories, case studies, and other materials which are posted on Canvas or linked to in the syllabus. The selected case studies below must be purchased online from Harvard Business Review (HBR) via our [Coursepack](#). If you are not part of the group presenting the case, you are still expected to read each case as a required reading, and be ready to discuss it in class and to participate in Q&A with your class peers.

Harvard Business Review Cases (Purchase and Download [here](#)).

- "Climate Action in Miami" (March 2022, Revised July 2022)
- "Rural Prosperity in the Face of Climate Change: Mahindra Strives for Sustainable Strategies" (August 2022)
- "Driving Decarbonization at BMW" (October 2022)
- "Sustainability Reporting at Dollar Tree Inc" (June 2022, Revised August 2022)
- "Allbirds: Decarbonizing Fashion" (August 2021, Revised December 2022)
- "The Making of a Public Health Catastrophe: A Step-by-Step Guide to the Flint Water Crisis" (January 2022)

School Policies and Expectations:

Restriction on the Use of Artificial Intelligence – Students are not allowed to use AI generative or machine learning tools to complete deliverables for this course. In accordance with Columbia University's academic integrity policy, individuals must complete their own work and properly acknowledge the circumstances, ideas, sources, and assistance upon which that work is based.

Accessibility Statement – We want you to succeed in this course. Contact disability@columbia.edu for learning accommodations.

Names/Pronouns – You deserve to be addressed in a manner that reflects your identity. You are welcome to tell me your pronoun(s) and/or name (if different from University records) at any time, either in person or via email.

Discrimination – We embrace the diversity of gender, gender identity & expression, sex, sexual orientation, race, ethnicity, national origin, age, religion, disability status, family status, socioeconomic background, and other visible and non-visible identities. Columbia University does not tolerate unlawful discrimination, discriminatory harassment, sexual assault, domestic violence, dating violence, stalking, or sexual exploitation and all such conduct is forbidden by Columbia University Policy.

Duty to Report – You deserve a University community free from discrimination, harassment, and gender-based misconduct including sexual harassment, sexual assault, domestic and dating violence, stalking, and sexual exploitation. It is therefore University policy to require Columbia faculty and staff to report to EOAA any instance or allegation of prohibited conduct involving any undergraduate or any graduate student that is disclosed to, observed by, or otherwise known to that employee. This requirement to report is in place to help ensure that students are provided appropriate resources and to allow the University to mitigate harm to our community.

Confidential Resources - There are confidential resources on campus who do not have a Duty to Report, including:

- Sexual Violence Response & Rape Crisis/Anti-Violence Support Center (SVR)
- Ombuds Office
- Medical Services
- University Counseling and Psychological Services
- University Pastoral Counseling
- Columbia Office of Disability Services

University employees working in a confidential capacity will not report information shared with them.

Inclusion - In the M.S. in Sustainability Management program, faculty and staff are committed to the creation and maintenance of “inclusive learning” spaces – classrooms and other places of learning where you will be treated with respect and dignity, and where all individuals are provided equitable opportunity to participate, contribute, and succeed.

In our classroom, all students are welcome regardless of race/ethnicity, gender identities, gender expressions, sexual orientation, socio-economic status, age, disabilities, religion, regional background, Veteran status, citizenship status, nationality and other diverse identities that we each bring to class.

Semester Schedule:

- **Week 1 (September 11):** Introduction to Sustainability and this Course
- **Week 2 (September 18):** Introduction to Sustainable Organizational Management
- **Week 3 (September 25):** The Circular Economy
- **Week 4 (October 2):** Organizational Management Continued: Strategy & Communications
- **Week 5 (October 9):** The Energy Transition
- **Week 6 (October 16):** Regeneration, Biodiversity & Rewilding
- **Week 7 (October 23):** The Role of Government in Advancing Sustainability

- **Week 8 (October 30):** Sustainable Cities and Lifestyles
- **Week 9 (November 6): Academic Holiday – No Class**
- **Week 10 (November 13):** Sustainability Leadership
- **Week 11 (November 20):** Sustainable Business and Finance
- **Week 12 (November 27):** Sustainability and Equity
- **Week 13 (December 4):** Sustainability Metrics, ESG and Carbon Accounting
- **Week 14 (December 11):** A Sustainable Planet and Conclusions

Schedule of Due Dates for Group Cases and Individual Assignments

Assignments are due by 6:10PM on the due date via upload to the Assignments tab on Courseworks.

Week	Case Study and Assignment Roster
1) Sept 11	
2) Sept 18	Group Case Preferences Poll: Posted to Canvas <i>Field trip to Newtown Creek, Thursday Sept 21st 1pm.</i>
3) Sept 25	Groups for Cases Assignments: Posted to Canvas Semester Project: Designation and Description of Your Organization - DUE Sept 25, 6:10pm
4) Oct 2	Individual Memo #1: Driving Decarbonization at BMW - DUE Oct 2, 6:10pm
5) Oct 9	Group Case #1: Patagonia: Textile Waste and the Circular Economy
6) Oct 16	Group Case #2: Regenerative Agriculture for Climate Action
7) Oct 23	Group Case #3: Miami & Climate Action
8) Oct 30	Semester Project: Case Study Outline due at 6:10pm Guest Speaker: Josh Gold, Senior Director, Public Policy & Communications, Uber
9) Nov 6	Academic Holiday - No Class Individual Memo #2: MGM Resorts: Decision on FIJI Water - DUE Nov 6, 6:10pm
10) Nov 13	Group Case #4: Waste Management in Sustainable Cities
11) Nov 20	Group Case #5: Allbirds: Decarbonizing Fashion
12) Nov 27	Group Case #6: Flint Water Crisis
13) Dec 4	Group Case #7: Sustainability Reporting at Dollar Tree
14) Dec 11	Semester Project: Final Submission - DUE Dec 11, 6:10 pm

DETAILED SYLLABUS - WEEK BY WEEK

Week 1 (September 11th): Introduction to Sustainability Management & This Course

We will begin the course by considering the purpose of sustainability management. What are we managing for? What are the thresholds of a sustainable operating space for humanity on our finite planet? Is a sustainable future feasible? In this session, we'll also provide an overview of the course and what we hope to accomplish by December.

Required Reading (Available in Courseworks):

- **Doughnut Economics:** "Who Wants to Be An Economist" pp. 7-10, and "The Power of Pictures" pp. 37-51. Available in Courseworks. Uploaded to Courseworks. Full e-book available via Columbia Library [here](#).
- **Environmentally Sustainable Growth: A Pragmatic Approach**, Chapter 1: Defining and Understanding Environmental Sustainability pp. 1-22. Uploaded to Courseworks. Full e-book available via Columbia Library.
- **Regeneration.** [Forward](#), [Regeneration](#), [Agency](#), and [How To Use This Book](#), pp. 4-13. Full text available online via Columbia Library [here](#).

Supplementary Video Assignments & Readings (not required but highly recommended):

- "Unit 1: Setting the Stage." Project Drawdown, December 22, 2020 (Run time: 13 min). www.drawdown.org/climate-solutions-101/unit-1-setting-the-stage.
- *Breaking Boundaries: The Science of Our Planet* | Netflix Official Site. www.netflix.com, 2022, <https://www.netflix.com/au/title/81336476>
- *The Nine Planetary Boundaries*. Stockholm Resilience Center. <https://www.stockholmresilience.org/research/planetary-boundaries/the-nine-planetary-boundaries.html>.

Week 1 Introductions: Welcome & Introduce yourself (Posted to Courseworks under Discussion):

Your class is part of your new and growing sustainability community. We are excited to get to know you, and for you to get to know your classmates! Please introduce yourself to the class and tell us where you are joining us from (your home country and city) and why you decided to study Sustainability Management. What are the key challenges or issues that you're hoping to solve?

Week 2 (September 18th): Introduction to Sustainable Organizational Management

Sustainability Management is the practice of managing organizations in a way that minimizes environmental impact and social costs, and maximizes resource conservation and reuse towards a circular, regenerative economy. As our growing economies damage the ecosystems that make life possible, managing the physical dimensions of sustainability must become a key pillar of organizational strategy in addition to financial management, human resources, IT, marketing, strategy and other more 'traditional' management tasks. Week 2 of the course will explore the fundamentals of internal organizational management.

In this class will also review the Action Memo format for your individual and group assignments, and discuss teamwork as you prepare for group work together.

The Group Case Preferences Poll will be posted to Canvas. You should respond with your preferences.

Field Trip to Newtown Creek Wastewater Treatment Plant scheduled for Thursday September 21st, 1-2pm for a maximum of 30 students. We will post an online sign-up form during Week 1 for students to reserve a space to join the field trip and viscerally explore New York City's wastewater treatment infrastructure.

Required Reading:

- **The Sustainable City, Chapter 4: The Transition to Sustainably Managed Organizations**, pp. 74-102.
- **Management Fundamentals, Chapter 1: The Evolution of Management**, pp. 7-18. Available online via Columbia Library [here](#) and in Courseworks.
- **Management Fundamentals, Chapter 3: Budget, Management and Control**, pp. 37-52. Available online via Columbia Library [here](#) and in Courseworks.
- Parloff, R. (February 6, 2018). "How VW Paid \$25 Billion for 'Dieselgate' -- and Got Off Easy" *Fortune*. Available online [here](#).

Supplementary Reading:

- **Management Fundamentals, Chapter 4: How Work Gets Done**, pp. 37-52. Available online via Columbia Library [here](#) and in Courseworks.
- Burkus, D. (October 5, 2020). **The 3 Things that Great Teams Have in Common**. Ideas.ted.com. <https://ideas.ted.com/the-3-things-that-great-teams-have-in-common>

Week 2 Discussion Question (posted on Courseworks):

In this week's reading, Chapter 4 of *The Sustainable City: The Transition to Sustainably Managed Organizations*, Pages 93-102 outlined egregious examples of companies that made short-term, environmentally damaging profit-making decisions at an outsized, long-term cost to the environment. "The short-term expedient result of ignoring environmental effects may be greater profit for some, but the long-term impact is higher costs and lower profit, and many of those higher costs must be borne by all of us" (pp. 94).

Reflecting on the VW's "Dieselgate", and reading deeper in this [Fortune Magazine](#) story, what failures of sustainability does this case highlight? As future CEOs and Chief Sustainability Officers, how can you prevent major ethical and environmental failures such as these? Do you think fines paid by VW and the negative PR proportionally impacted corporate profits or was the risk ultimately worth the competitive return for VW?

Week 3 (September 25th): The Circular Economy

A transformative challenge for sustainability managers is moving from a 'throwaway' linear economy to a circular economy driven by design and effective management of materials and waste. How do we create an economy and organizations that can undo some of the damages and wastefulness of today?

This week we will learn about the circular ambition that seeks to eliminate waste and protect natural systems, tackling climate change and addressing other important environmental and social needs.

Groups for Cases Assignments will be posted to Canvas.

The designation and description of the organization that will be the subject of your Semester Project is due before the start of class.

Required Reading:

- **Doughnut Economics, Chapter 6: Create to Regenerate**, pp. 175-205.
- **Cradle to Cradle, Chapter 4: Waste Equals Food**, pp. 92-117, and **Chapter 6: Putting Eco-effectiveness into Practice**, pp 157-185.
- **The Circular Business Model** by Atalay Atasu et al. (July-August 2021), published in HBR's 10 must reads of 2023. Available online via Columbia library [here](#).
- **Product Stewardship Institute:** Peruse PSI's website: <https://productstewardship.us>
- Winters, J. (September 5, 2023), **After a Year and a Half, Negotiators Finally Have a Draft of the Global Plastics Treaty**, *Grist*. Available online [here](#).

Week 3 Discussion Question (posted on Courseworks) - Too much stuff!

This week for our discussion topic, please take a look at the very entertaining and illuminating animated video "[The Story of Stuff](#)" (21 minutes). Our current economies and systems of manufacturing do not work like nature. They are linear, extractive, and degenerative. We extract earth's minerals, metals, biomass and fossil fuels. Then we manufacture them into products to sell to consumers, who quickly use and throw most of these items away. This has delivered much profit and financially enriched many nations, companies and individuals. But it is a fundamentally flawed design. It runs counter to the rules of nature and our finite planet. We must shift to circular economies.

It's quite a shock to hear how deliberately our culture of consumption was created. For example, a quote from retail analyst Victor Lebow 1955: "Can society at large examine the underlying assumptions we have accepted about the value of making consumerism our way of life and reconnect to things that matter: meaningful experiences, time with family and friends, doing things that serve ourselves, each other, the planet, and the future. Is it possible to shift culture away from consumerism, and limit human consumption to what nature can provide?"

We resonate with Kate Raworth: "The aim of the economy should be meeting the needs of all within the means of the planet." "Instead of economies that need to grow, whether or not they make us thrive, we need economies that make us thrive, whether or not they grow."

What are your thoughts and reflections after watching "The Story of Stuff"?

Week 4 (October 2nd): Organizational Management: Strategy & Communications

Week four continues our exploration of the fundamentals of organizational management and why this matters in the transition to a sustainable, regenerative planet.

Individual Memo Assignment 1 Due by 6:10pm, Before the Start of Class: MGM Hotels: making a decision on water.

Required Reading:

- **Management Fundamentals, Chapter 7: Strategic Planning**, pp. 93-102.
- **Management Fundamentals, Chapter 10: Marketing, Stakeholder Relations and Public Engagement**, pp. 133-148.
- Cross, R. et al. (Nov-Dec 2021). **How to Succeed Quickly in a New Role**. <https://hbr.org/2021/11/how-to-succeed-quickly-in-a-new-role> (Also available as audio article)
- Galan, S. (Nov-Dec 2022). [The CEO of Iberdrola on Committing to Clean Energy](#). Harvard Business Review Magazine.

Supplementary Reading:

- **Management Fundamentals, Chapter 5: How We Know What's Been Done: Organizational Performance and Information Management**, pp. 65-80.

Week 4 Discussion Question - Strategies for Solving Climate Change:

As the leader of an organization committed to sustainability, you need to be up-to-date on the science of solutions to reduce pressures across the planetary boundaries, and be ready to advise confidently on the most impactful solutions for potential implementation.

Project Drawdown is an amazing organization that has cataloged and evaluated existing solutions to climate change, comparing them "apples to apples" in order to evaluate the relative impact of each solution. To reverse climate change - just one of the planetary boundaries critical in our journey to a sustainable planet - we must urgently reduce GreenHouse Gas (GHG) emissions while also protecting/increasing sinks (that's where Nature is so important).

This week, please watch this short video [Project Drawdown: Reducing Sources](#) (it's 23 min long). You can compare solutions <https://drawdown.org/solutions/table-of-solutions> to ascertain Gigatons CO2 equivalent reduced, reference Scenario 1, which is limiting climate change to 1.5C from 2020-2050.

Tell us about a solution within a sector that is surprising to you in terms of its relative impact. How does it stack up against a solution you'd thought would be more impactful? Have you come across organizations that implement this solution in your works, travels and readings?

Week 5 (October 9th): The Energy Transition

The electricity sector is responsible for 25 percent of total anthropogenic greenhouse gas emissions. Transitioning away from fossil-fuel based electricity is key to a sustainable future. look Yet [733 million people](#) still lack access to electricity. How do we accelerate the transition to a sustainable and equitable future that isn't built on fossil fuels? How do the means of transmitting, storing, and efficiently using electricity need to evolve? How do we 'electrify everything'?

Required Reading:

- Griffith, **Electrify: An Optimist's Playbook for Our Clean Energy Future** (2021): Chapters 1 to 3, 5, 6, 7, 9 and 16

- IEA (May 2021). [Net Zero by 2050: A Roadmap for the Global Energy Sector: Summary for Policy Makers](#)
- **Energy Democracy: Advancing Equity in Clean Energy Solutions:** [Introduction](#)

Case Study Readings: Patagonia: Textile Waste and the Circular Economy

The case question will be posted to Courseworks and updated in the syllabus after groups are assigned in Week 3.

- [How Much Do Our Wardrobes Cost to the Environment?](#) World Bank Feature Story (September 23, 2019).
- Gelles, David (September 14, 2022). [Billionaire No More: Patagonia Founder Gives Away the Company.](#) *The New York Times*.
- Patagonia (August 14, 2019). [Recycling Is Broken. Now What?](#)

Supplementary Reading and References:

- IRENA (2021): [The Renewable Energy Transition in Africa](#)
- <https://drawdown.org/sectors/electricity>
- <https://drawdown.org/sectors/other-energy>
- Tracking SDG7: The Energy Progress Report. <https://trackingsdg7.esmap.org/>
- Davies, C., Dempsey, H. & Bushey, C. (September 4, 2023). **Why the Electric Vehicle Battery Race Needs a Recycling Revolution.** *The Financial Times*. Available online [here](#).

Week 5 Discussion Question: Electrify Everything

Question based on reading of Electrify.

Week 6 (October 16th): Regeneration, Biodiversity & Rewilding

Biodiversity is a critical planetary boundary. Without nature and the ecosystem services it provides, life as we know it on Earth cannot continue to exist. How can we imagine a world without elephants, without butterflies, without moths on windscreens? We will lose more than beauty as the complex interconnected strands of ecosystems come undone. This week we will explore the hopeful regeneration movement including restoring habitat, rewilding, wildlife corridors, regenerative agriculture and regenerative ocean farming. It's an exciting movement to reverse nature loss and rewild our cities and hearts.

Required Readings:

- **Regeneration: Wildlife Corridors** pp 72-74.
- Safina, Carl, *Wild Things (2021)*. Essay in **Regeneration** pp 90-93.
- Winters, Chris (February 16, 2021). [Three Cities Switching to Life-Affirming Economies: Doughnut Economics invites nature and social well-being into urban planning.](#) *Yes Magazine*.
- [Drawdown Solution: Seaweed Farming](#)

Case Study Readings: Regenerative Agriculture

- Gorti, Sanjana et al. **Rural Prosperity in the Face of Climate Change: Mahindra Strives for Sustainable Strategies.** Available as part of the HBR Coursepack.
- Project Drawdown Sector Summary: [Food, Agriculture, Land-Use.](#)

- **Regeneration: Regenerative Agriculture**, pp 96-99.
- [John Deere 2022 Sustainability Report](#)

Supplementary Reading and Videos:

- Sir David Attenborough, and Jonnie Hughes. *A Life on Our Planet : My Witness Statement and a Vision for the Future*. Grand Central Publishing, 2020. Also available as a documentary on netflix: www.netflix.com/title/80216393.
- Ellen MacArthur Foundation. Regenerating Nature in a Circular Economy.

Week 6 Discussion Question - Sustainable Cities and Biodiversity:

How does protecting and restoring biodiversity fit within visions for a sustainable city? This week's reading list includes an [article](#) based on Doughnut Economics, inviting nature and social well-being into urban planning. In 'downscaling' the doughnut economics model to cities, Kate Raworth asks:

“What would it take for your city to belong to its natural habitat? What if your city were as generous and as resilient as the wild land next door? How could your city’s landscapes and greenscapes, pavements and rooftops be designed to sequester as much carbon as the forest next door, to store as much groundwater after a storm, to hold as much biodiversity or cool as much air as the forest does from the treetops to the forest floor? The more that your city can match the generosity of the living world in which it is embedded, the more it can become a resilient and thriving place to live.”

What inspiring project or vision from your home or adopted city invites coexistence with and/or protects and restores biodiversity? Some examples are re-wilding urban spaces, climate adaptation solutions that are based on nature (natural infrastructure), creating wildlife bridges for threatened species, programs to encourage coexistence with urban wildlife, and wetland restoration initiatives. How does biodiversity work to shape a more sustainable city?

Week 7 (October 23rd): The Role of Government in Advancing Sustainability

Governments play a crucial role in building sustainable cities, creating infrastructure and regulatory frameworks. At an international policy level, countries must collectively work towards global goals on emissions reductions, adaptation and finance. Week 4 explores the various layers of government and policy, from international to local, and their roles in advancing sustainability.

Required Reading:

- **The Sustainable City, Chapter 5: The Role of Politics and Public Policy in Building Sustainable Cities**. pp. 103-129.
- Shannon, N. G. (2022, October 5). **What Does Sustainable Living Look Like?** Maybe Like Uruguay. *The New York Times*. Available online [here](#).

Case Study Reading:

- Kanter, Rosabeth M. (March 2022, Revised July 2022). **Climate Action in Miami**. Available as part of the HBR Coursepack.

Week 7 Discussion Question: What does Sustainable Living Look Like? (posted on Courseworks):

A recent NY Times article (10/05/2022), "[What Does Sustainable Living Look Like? Maybe Like Uruguay](#)" (includes option to listen to the story if you prefer) asks us to imagine the lifestyle of a household in a developed nation that could adapt to live within the 2 tons per person carbon budget needed to reach 1.5C Paris Climate Goals (vs. US current average household carbon footprint of 50 tons according to this article). It then explores the amazing sustainable transformation of Uruguay.

"The true revolution is a different culture: learning to live with less waste and more time to enjoy freedom." said Uruguay's former President, Jose Mujica when interviewed for this story. Can governments help to inspire a 'revolution' in thinking about the dominant culture of consumption'?

What surprised you the most about Uruguay's transformation to a more sustainable society? Please add additional thoughts you have related to this story and the topics we've discussed so far in class.

Week 8 (October 30th): Sustainable Cities and Lifestyles

Cities hold the key to achieving global sustainability. Sustainable cities must consider the challenges of energy, water, waste, sewage, food, transport and public space. They also need to be places that support sustainable lifestyles and the shared economy, and transform from a consumer-driven society to something new. This week we will explore sustainable cities and sustainable lifestyles.

Guest Speaker: [Josh Gold](#), Senior Director, Public Policy & Communications, Uber

Required Reading:

- **The Sustainable City, Chapter 1: Defining the Sustainable City** pp. 3-19.
- **The Sustainable City, Chapter 2: Sustainable Urban Systems**, pp. 20-49.
- **The Sustainable City, Chapter 3: The Sustainable Lifestyle**, pp. 50-73.
- **The Sustainable City, Chapter 11: Sustainable Urban Living and the Sharing Economy**, pp. 222-242.
- **Regeneration: Regeneration, The City**, pp. 148-169 also *The Nature of Cities*. Also summarized online [here](#).
- Buckley, C. (2023, August 24). [Tiny Forests with Big Benefits](#). *The New York Times*.
- Uber. **Environmental, Social, and Governance Report 2023**. "Environmental Sustainability and Climate Change," pp. 36-55. Available online [here](#).
- Natural Resources Defense Council, Issue Brief, **Moving Forward: The Role of Transportation Networking Companies in a Sustainable Future** (November 17, 2021) Available online [here](#).

Supplementary Reading and Videos:

- [Earth Day: LA's New Green Deal](#)
- [The Simple Genius of NYC's Water Supply System](#)

Week 8 Discussion Question: Consumerism and De-growth?

In Week 1, you read Chapter 1 of Professor Cohen's newest book, "Environmentally Sustainable Growth: A Pragmatic Approach" (available in Courseworks, Week 1 Readings). This week's reading includes a Harvard Business Review article, "Why 'De-growth' Shouldn't Scare Business" (Available

online [here](#) and in Courseworks). A key question posed by Professor Cohen is, 'Do we need to reduce consumption'? Do you believe it is politically possible to reduce consumption? Is de-growth possible?

Week 9 (November 6th): No Class. Academic Holiday

Individual Memo #2 Due - Deadline Monday November 6th, 6:10pm

Week 10 (November 13th): Sustainability Leadership

What does it take to be a leader in sustainability, someone who champions sustainability from the top down? And what can we do to move corporate sustainability leaders from the minority to the norm? This week we will examine the role of leadership in sustainability, and how management must adjust to the needs of the 21st century. We will also examine the issue of PFOAs and other 'forever chemicals' in our environment as a case study for example of the sustainability leadership that is needed to make our planet safer.

Required Reading:

- **Management Fundamentals, Chapter 2: Leadership**, pp. 21-36.
- **Management Fundamentals, Chapter 11: Organizational Ethics**, pp. 149-163.
- Kanter and Hayirli. (March-April 2022). [Creating High-Impact Coalitions](#). *Harvard Business Review*.
- Rich, Nathaniel, 2021. **Dark Waters**. Chapter 1 of *Second Nature: Scenes from a World Remade*. MacMillan, New York.

Supplementary Readings:

- [Leadership \(A Special Report\): Sustainably Managed Companies --- The 100 Most Sustainably Managed Companies in the World](#) *Wall Street Journal* (2020, Oct 14).

Case Study Readings: Waste Management in Sustainable Cities

- **The Sustainable City, Chapter 6: Waste Management in New York City, Hong Kong and Beijing**, pp. 103-130.
- Brosnahan, C. (November 6, 2020). [Despite Recycling Success, SF's Zero Waste Goal Remains Elusive](#). *San Francisco Public Press*.
- Trickey, E. (2019, November 21). *San Francisco's Quest to Make Landfills Obsolete*. POLITICO. Available online [here](#).
- [The State of Recycling in New York City Is Extraordinarily Grim](#)

Week 10 Discussion Question - Leadership:

This week is focused on leadership. Who is an inspirational leader that you follow? What qualities or 'things that they do' makes them a great leader in sustainability in your view?

This could be a leader in corporate sustainability, environmental sustainability, an activist, an indigenous leader, a politician, an artist or a journalist - anyone in their profession who has helped to

push forward our collective journey towards a sustainable future (And if you have more than 1 whose voice you want to amplify, we'd love to hear it!)

Week 11 (November 20th): Sustainable Business & Finance

How do we finance the transformation to a sustainable world and draw the capital that is urgently needed for investments in infrastructure and the technological solutions needed to transform our economies?

Required Reading:

- Deutz, A., Heal, G. M., Niu, R., Swanson, E., Townshend, T., Zhu, L., Delmar, A., Meghji, A., Sethi, S. A., and Tobin-de la Puente, J. 2020. [Financing Nature: Closing the global biodiversity financing gap](#). The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability.
- **The Sustainable City, pp. 76-78 (Sustainable Finance)**

Podcast Assignments:

- Pricing Nature Episode 14: Kim Stanley Robinson, Kate Raworth, and Delton Chen Discuss "Carbon Currency". Available pricingnature.substack.com/p/episode-14-kim-stanley-robinson-kate

Case Study Reading: Sustainable Fashion

- Toffel, Michael et al. **Allbirds: Decarbonizing Fashion**. Available as part of the HBR Coursepack.

Supplementary References:

- [Carbon Collective](#)
- [Invest your Values](#)

Week 11 Discussion Question - Closing the Biodiversity Finance Gap:

It's estimated that [between US\\$ 3.3-4.5 trillion per year](#) needs to be mobilized to achieve the 2030 Agenda for Sustainable Development (2014). According to [McKinsey, \\$3.5 trillion additional annual investment](#) is needed for the net-zero pathway alone. The bottom line is that a massive acceleration in capital reallocation is needed to finance the sustainable transition for our planet and society. At every opportunity, capital needs to be mobilized to finance sustainable development, the green transition, electrification, biodiversity protection, green infrastructure, health care, affordable housing, and more!

In this week's readings, "[Financing Nature: Closing the Global Biodiversity Financing Gap](#)" (2020) lays out a very important subset of this challenge for finance: to "fundamentally rethink our relationship with nature and transform our economic models and market systems". There is an urgent need to scale up finance for nature and close the \$598 Billion to \$824 billion biodiversity finance gap.

Explore the financial and policy mechanisms this report proposes (see table on page 21). Choose 1 mechanism that is either new to you or of interest. Explain its potential to close the biodiversity funding gap and outline a real-world example of its application (Eg an example project or market).

Week 12 (November 27th): Sustainability and Equity

This week we will explore the links between equity, the environment and the economy, and how this relates to our pursuit of a sustainable planet.

Required Reading:

- **The Sustainable City, pp. 131-134 (Social Inequality in Cities)**
 - Cohen, Steven and Guo, Dong. "SOCIAL INEQUALITIES IN CITIES". *The Sustainable City*, New York Chichester, West Sussex: Columbia University Press, 2021, pp. 131-13
- Lustgarten, Abrahm (2022, 27 July). **The Barbados Rebellion**. *New York Times Magazine*. <https://www.nytimes.com/interactive/2022/07/27/magazine/barbados-climate-debt-mia-mottley.html>

Case Study Reading:

- Varley, P. et al (2022, Jan 11). **The Making of a Public Health Catastrophe: A Step-by-Step Guide to the Flint Water Crisis**. Available as part of the HBR Coursepack.

Supplementary Reading:

- **How Communities of Color are Hurt Most by Climate Change**. Forbes Magazine 7 June 2021. www.forbes.com/advisor/personal-finance/communities-of-color-and-climate-change
- **The Intersectional Environmentalist** (Select Chapters)

Week 12 Discussion Question: An equitable climate (and energy) transition for island nations

Let's discuss and consider how climate change mitigation, adaptation (including the energy transition) and equity intersects with sovereign debt for small nations on the frontlines of climate impacts.

This NY Times Magazine story (27 July 2022), "Caribbean nations are trapped between the global financial system and a looming climate disaster. One country's leader has been fighting to find a way out" (available on Courseworks) tells the story of Prime Minister Mia Mottley's battle for debt reduction for Barbados to fund her country's fight against the climate crisis including infrastructure needed for climate adaptation, pandemic recovery, and to meet development goals. As told in this story, "Caribbean nations are being asked, in a sense, to pay not only for their own debts, but the rest of the world's debts too, for all the progress it made while leaving the Caribbean behind". As small nations accumulate substantial debt because of climate change, which they didn't cause and have not benefited from causing, it raises even larger questions - shouldn't the climate crisis be considered an IMF funding emergency? Key concepts mentioned in the story include climate reparations, climate colonialism, debt forgiveness and Prime Minister Mottley's 'big ask' for the establishment of an IMF Climate Trust.

Take a quote from the story that was most meaningful to you, or a concept that is new to you, and share your reflection on it with class.

Week 13 (December 4th): Sustainability Metrics, ESG & Carbon Accounting

You can't manage something you can't measure. This week we will explore the growth of sustainability indicators and reporting. We will explore sustainability metrics, environmental disclosure and sustainability reporting, and the raging debate and attention on "ESG" - is it greenwashing or a misunderstanding? We will also discuss the U.S. Securities and Exchange Commission's proposed rule that would require publicly traded companies to make climate-related disclosures for investors.

Required Reading:

- Pucker, K. P. (2021, April 9). **Overselling Sustainability Reporting**. *Harvard Business Review*. <https://hbr.org/2021/05/overselling-sustainability-reporting>
- Taparia, H. (2022, September 29). **One of the Hottest Trends in the World of Investing is a Sham**. *The New York Times*. www.nytimes.com/2022/09/29/opinion/esg-investing-responsibility.html
- **SEC Fact Sheet: Proposed Rules to Enhance and Standardize Climate-Related Disclosures for Investors**, March 21, 2022, <https://www.sec.gov/files/33-11042-fact-sheet.pdf>

Case Study Reading:

- Srinivasan, S. & Ni, Li-Kuan (June 2022, Revised August 2022). **Sustainability Reporting at Dollar Tree Inc**. Available as part of the HBR Coursepack.

Week 13 Discussion Question - ESG and its promises and limitations:

"[One of the Hottest Trends in the World of Investing Is a Sham](#)" is the attention-grabbing title of a September 2022 opinion piece in the NY Times. The author, Hans Taparia, of NYU Stern School of Business concludes that "the current system for E.S.G. investing is just regular capitalism at its slickest: ingenious marketing in the service of profits." Kenneth Pucker, the former COO of Timberland - now an advisor, investor and educator with an abiding focus on sustainability and ESG, writes in *Harvard Business Review* that the issue is we are confusing output with impact, thus "[Overselling Sustainability Reporting](#)"

Reading these two pieces, what are your views on ESG and its promises and limitations. Is it working and if not, how can it be transformed?

Week 14 (December 11th): A Sustainable Planet & Conclusions

Putting it all together: How sustainability leaders and managers are needed to drive the transformation to a sustainable future. This is a future of urgent action to tackle climate change, biodiversity loss and pollution -- while making peace with nature.

Reading Assignment:

- **Management Fundamentals, Chapter 12: The Future of Work**, pp. 165-173.
- [Dr Jonathan Foley \(2021\). We Need 4 Waves of Climate Action.](#)
- **Regeneration**. Selected Chapters.

Supplementary Reading:

- [The Happy Planet Index](#)

Week 14 Discussion Question - Closing Thoughts:

As our last discussion and final week of class, please share your thoughts on a sustainable future! What most excites you about the urgent journey ahead to transition to a more sustainable, net-zero world? Where do you see yourself making the most impact? What do you think will be the greatest challenges?

SEMESTER PROJECT DUE
Monday December 11th, 6:10pm

CASE STUDY SEMESTER PROJECT

Project Deadlines:

1. Submit the name of your organization by Week 3, **September 25, 2023, at 6:10 pm.**
 - a. Include the name of the organization you'd like to focus your case study on (if not maintaining anonymity) and a brief paragraph describing the organization's background information—sector, mission and vision, location, organization size, and business model.
2. Submit case study outline by **October 30, 2023, at 6:10 pm.**
 - a. Your case study outline should address the five subheads you've selected for your case study. The outline should be three pages double-spaced in a standard 12 pt. font (e.g., Times New Roman, Arial, Calibri) and can be written in paragraph-form or in bullet points.
3. Final submission by **December 11, 2023, at 6:10 pm.**

Project Overview:

Over the course of the semester, you will be writing your own case study about an organization of your choice (public, private for-profit, and private nonprofit) analyzing its efforts to incorporate environmental sustainability into its organizational structure and practices. With this assignment, you will be addressing the fundamental challenges facing managers in operationalizing sustainability strategies within routine decision-making processes inside organizations. Your case study should identify best and worst practices for organizational management and make reasonable recommendations for integrating sustainability management into the organization. Additionally, your case study should address the applicability of these recommendations to other organizations.

To collect information on the organization, you can conduct key informant interviews or rely on secondary sources (e.g., company website, newspaper articles, magazines, additional website sources, etc.). The organization can remain anonymous but do indicate the company industry (e.g., Major Insurance Company, Major University). You can conduct this study on an organization that you work/have worked for or have another personal or professional connection to. The choice of organization is up to you.

This assignment is an opportunity to reflect on what you've learned throughout the semester and implement your understanding of the challenges to integrating sustainability in an organization and its management practices. Consider the organizational culture and management of the company and how those may serve as either a hindrance to or an avenue for bringing in the function of environmental sustainability.

Your case study should include **at least five** of the boldfaced subheads below and address all questions of the respective sections you choose. Your case study should be **7-9 pages single-spaced** written in a standard 12 pt. font (e.g., Times New Roman, Arial, Calibri). Figures/tables/charts/graphs can be included in the body of the paper or in an appendix, but will not count toward page limit and should be appropriately cited. Citations can be formatted following any style convention of your choice (e.g., MLA, APA, Chicago, etc.) so long as they are consistent throughout.

Assignment Questions:

- 1. Background on the Organization:** Sector (public, private for-profit, private nonprofit), mission/market niche, number of staff, revenues/expenses/geography, strategy and/or business model.

- 2. Definition of Sustainability in this Organization:**
 - a. Does it include non-environmental factors? - Yes/No
 - i. Non-environmental factors include:
 - *Social*: small business mentoring programs on sustainability; increase worker wellbeing through bicycle commuting, free lunch, electric vehicle charging stations;
 - *DEI*: intentional hiring of women and other minority groups;
 - *Reporting*: commitment to transparent disclosure of carbon emissions or other metrics; routine compliance checks;
 - *Safety*: reduce worker injury.
 - b. Is it a "standard" definition, or does it include some unusual elements perhaps unique to the organization? Please describe.
 - i. *Standard definition* includes components relating to renewable energy use, emission standards, water usage, waste management, biodiversity, etc.
 - ii. *Unusual elements* may include programs unique to the organization, toxics or resources specific to the organization, equity components, worker safety, employee wellbeing, etc.
 - c. Does management address sustainability within the organization only, or does it also consider the impact of its choices on its supply chain and its customers/ stakeholders?
 - i. *Internal organization culture only*; scope of sustainability efforts:
 - Extends to all of the organization,
 - Certain programs/areas,
 - Level of employees.
 - ii. *Considers supply chain management (producers)*, e.g., building better reporting standards, active role in implementing and endorsing industry best practices, acknowledgment of UN's Sustainable Development Goals (SDGs), developed programs to educate supply chain partners on sustainability.

- iii. *Customers and stakeholders (demand side)* are informed of sustainability efforts and their role in strategy, organization's data is accessible. Is there an effort to return manufactured goods for reuse?

3. Leadership:

- a. Does the CEO, CFO, and/or COO support sustainability? - Yes/no; Title of supporter
 - i. How do they demonstrate support or opposition?
 - o *Support*: active role in addressing sustainability in press releases, internal memorandums, email announcements, and newsletter updates; sustainability is included in company's mission statement and/or values, visible on organization's website, mentioned in public speaking engagements, committed investments, and operational budgets.
 - o *Opposition*: lack of acknowledgment, lack of further investment or commitments.
 - b. Who leads the sustainability function? - Title of leader(s), e.g., executive director, program managers, scientists/developers, etc.
 - i. How is this sustainability leader perceived?
 - o Including: Open to new ideas, approachable, respected by peers, ability to execute sustainability measures, level of authority.
 - ii. What is the sustainability leader's relationship to organizational leadership?
 - o Rank in organization's hierarchy.
 - iii. Is the sustainability leader an internal or external hire?
 - o *Internal*: name of department/program within the organization.
 - o *External*: name of consulting firm/contractor.

4. Organization Structure and Capacity:

- a. In what department within the organization does the function "sit"? Are roles spread out through multiple departments?
 - i. Name of department(s) and/or program(s).
- b. What kind of people work on it?
 - i. E.g., scientists, engineers, analysts, communications/PR, finance people.
- c. What is the sustainability team expected to do, and what is their main goal?
 - i. Activities may include:
 - o launch PR/marketing campaigns,
 - o develop new technologies to advance sustainability,
 - o measure natural resource consumption,
 - o create annual sustainability reports,
 - o incremental investments,
 - o improve organization's brand/image,
 - o ensure sustainable operations and supply chains.

5. Strategy and Metrics: What are the organization's sustainability goals?

- a. How is sustainability measured in this organization?
 - i. Identify and track sustainability key performance indicators (set to appropriate benchmarks);
 - ii. Resource use and emissions targets (e.g., water consumption, greenhouse gas emissions, renewable energy use);

- iii. Periodic assessment of sustainability education;
- iv. Changes in funding/investments attributed to sustainability efforts;
- v. Growing number of staff in sustainability team;
- vi. Changes in internal operations (reduced waste and paper use, recycling, etc.).
- b. How important are their sustainability goals to the overall organizational strategy?
 - i. Potential impacts on supply chain production, market pricing, consumer demand, etc.
- c. Is there a sustainability component in employee performance reviews?
 - i. E.g., employees are surveyed on sustainability efforts within the organization.
- d. Does management compensation depend on achieving any sustainability targets?
 - Yes, no, not applicable
- e. What sustainability outputs and outcomes has the organization produced, i.e., progress thus far? How does this compare with strategic goals?
 - i. *Outputs*: any measurable targets (e.g., data, statistics).
 - ii. *Outcomes*: timelines of progress made toward sustainability goals.
 - iii. Comparison with strategic goals requires time commitment and comparable indicators.
- f. Are there examples of strategic choices that the organization has taken (or not taken) due to the recommendations of the sustainability function?
 - i. E.g., update emissions and resource use targets, use third-party sustainability certification, implement routine monitoring, etc.
- g. How is a successful sustainability program defined within the organization?
 - i. E.g., achieving a more environmentally-conscious culture internally, meeting objectives in overall sustainability strategy, achieving a certain amount of funding, creating an overall sustainability program, etc.

6. Relations with Suppliers and Partners:

- a. Do they share sustainability goals and work and if so, how?
 - i. Organization incorporates suppliers and partners into sustainability goals.
 - o Detail to what extent, i.e., working with suppliers with sustainable-practices accreditation and/or aiding suppliers to receive accreditation.
 - ii. Do they require suppliers or partners to meet certain sustainability requirements? If so, how do they ensure compliance?

7. Resources – Capital, Operating, and Personnel for Sustainability:

- a. How much staffing and funding is allocated to the sustainability function?
 - i. Number of staff in sustainability team (or across departments) and monetary amount.
 - ii. Percentage of the total budget allocated to sustainability efforts, and is it adequate?
 - iii. Are any sustainability efforts underfunded? Would sustainability efforts improve with more funding?
- b. Is there capital funding for sustainability-related equipment and other needs?
 - i. Yes/no; amount, time period covered, and list other items.
 - ii. Is it sufficient? Yes/No.
- c. Are the funds allocated to sustainability efforts increasing or decreasing?
 - i. Funding increases or decreases when comparing across annual budgets?

8. Internal Perceptions of Sustainability:

- a. How is sustainability perceived within the organization?
 - i. Important, neutral, not important, not sure.
- b. Is it considered a success? Central? Fringe?
 - i. Yes; central to the organization's mission,
 - ii. No; not well known within the whole organization,
 - iii. In progress; sustainability is acknowledged in some of the organization's activities.
- c. Is sustainability an established program or a temporary campaign?
 - i. Sustainability is established within the organization, only part of a pilot program/temporary campaign.
- d. How does sustainability compare to the success of other programs in the organization?
 - i. Program more effective than other initiatives, receives greater interest.
- e. Do employees perceive sustainability to be an important part of the organization's success? In what areas of sustainability has the company made valuable progress?
 - i. Important, neutral, not important, not sure.
 - ii. Varied responses for progress: objectives are being met within a timely fashion within the organization's overall sustainability strategy and goal.
- f. Is sustainability included in the employee onboarding process?
 - i. New employees are trained in the history of sustainability efforts in organization, current initiatives, and future goals.

9. Importance of Sustainability:

- a. Is sustainability an integral part of the organization? Yes / No.
- b. Why or why not?
 - i. Varied responses: lack of interest or sustainability knowledge, limited funding, technology availability, employee awareness, no existing sustainability program, consumer pressure, investor support, etc.
- c. What contributed to the success or failure to make sustainability an organizational routine? (according to insiders, according to outside analysts and observers).
 - i. Varied responses that may include institutional, technical or educational challenges/successes.
 - o E.g., used SMART goals, organization-wide support, routine monitoring and objective evaluation, appropriate investment, resulted in loss/profit, etc.

10. The Future of Sustainability in the Organization:

- a. What would be needed to improve the sustainability performance of this organization?
 - i. Education on sustainability, identify Key Performance Indicators (KPIs), changing internal culture, increase capital funding, increase staff and resources of sustainability team in the organization, accelerate implementation of sustainability efforts, enforcement of sustainable practices, increase data transparency, produce meaningful sustainability reports, consider societal consequences in the organization's activities, etc.
- b. Are any of those steps underway, under discussion, or planned?

- i. Timeline of efforts.
- c. What is the probable future of the sustainability function in this organization?
 - i. Varied responses: good foundation to continue growth into all areas of organization, more work needs to be done to improve sustainability, sustainability efforts will subside, sustainability efforts are yet to be considered.