

Purpose: This course introduces you to the opportunities, constraints, and pitfalls that firms and industries face in confronting environmental considerations. We will examine different “drivers” of green markets, with special emphases at the end of the course on the risks and rewards associated with global warming and, finally, the future of sustainability.

Grading: Grades are based on two exams (the latter is cumulative for the entire semester’s work) and a final project (1/3rd of the grade for each). *Make-up exams are not given—exceptions are rarely granted.* Details will be given regarding the project later in the semester but, it suffices to say, that it will be 10-15 pages where you apply what you have learned in the class to a specific green market effort. While many of you may want to apply for a “W” as well, there are a limited number of spots and **no more** will be created. Number grades are translated to letter grades in a standardized manner (averages of 93 and up A, 90-92 A-, 87-89 B+, 83-88 B, 80-82 B-, and so forth). For those in the “W” section, **if you do not give me the required version of the paper to receive feedback on the writing on time, you will be docked one-half grade for your final grade** (e.g., A- will become a B+, etc.).

Course structure: Each class will begin with some time for students (and for me) to discuss relevant events of the day. Students are encouraged to read, watch, and listen widely to observe the world around them and how it is affected by green issues. So please feel free to discuss anything germane that you have noticed in the wider world. We will subsequently continue to the course materials.

Also, while the syllabus provides what materials will be covered on what days, I reserve the right to update things as we progress. The nature of our course is such that it works best when we have the flexibility to proceed somewhat differently from initial plans.

NOTE: Should events intervene—weather, sickness, etc.—I reserve the right to convene a makeup session. This will be done in a manner taking student schedules and any other mitigating circumstances into account.

Readings: Do not let the number of readings scare you—most are very short and accessible, and the class only has 11 substantive sections. Most readings are available on-line through the library via Blackboard. Instructions will be provided for obtaining the case materials via the web (there will be some cost involved). Ideally, all materials should be read before class. There will be some materials that I will absolutely expect students to have read in advance (I will provide notice).

Books: There are two books for the course that are available via the bookstore (unfortunately, the library cannot make them available as all resources must be electronically digitized):

Magali A. Delmas with David Colgan. *The Green Bundle*.

Michael Lenox and Aaron Chatterji. *Can Business Save the Earth?*

Lecture materials: Summary materials and figures will be provided on-line for students. **Full lectures will not be included: No combination of pleading, logic, yelling, cajoling, etc. will make me change my mind.**

Office Hours, etc.: Office hours are Monday, 9:30-11:30 in Harkness 108. Also, I will do my best to accommodate requests to interact at other times—send an email with a few times that work for you. Finally, feel free to get in touch by e-mail about other things. Also, in this world of zoom, you also have the option of contacting me by email (lawrence.rothenberg@rochester.edu) and we can try to arrange a virtual meeting (please provide some available times). Finally, feel free to get in touch by e-mail about other things.

The TA for the course is Joe Essig (e-mail jessig2@ur.rochester.edu), whose office is Harkness 305 and whose office hours are Wed., 2:00-4:00 P.M. Joe encourages reaching out via e-mail to set up an appointment outside these hours, and a zoom meeting is a possibility.

Credits: This course follows the College credit hour policy for four credit courses. This course meets twice weekly for 3 academic hours per week. The course also includes independent out-of-class assignments for 1 academic hour per week. Notably, in this course, students will complete independent study using readings and other course materials include preparation of multiple cases as specified in the syllabus and completion of an independent paper over the course of the semester.

I: Introduction (Aug. 26th)

Lennox and Chatterji, Ch. 1.

Optional (*not required*):

GreenBiz Group. *State of Green Business 2023*.

II: Basic Concepts (Aug. 28th, Sept. 4th)

Delmas, Intro and Ch. 1.

David P. Baron, and Thomas P. Lyon. 2012. "Environmental Governance," in *The Oxford Handbook of Business and the Natural Environment*.

Andrew W. Savitz. 2014. *The Triple Bottom Line*, 2nd edition. Ch. 2.

V. Kasturi Rangan, Lisa Chase, and Sohel Karim. 2015. "The Truth About CSR," *Harvard Business Review* 93(1/2): 40-49.

Elaine Conway. 2018. "Sustainability, the Triple Bottom Line, and Corporate Social Responsibility," in *Contemporary Issues in Accounting*.

David A. Anderson. 2019. *Environmental Economics and Natural Resource Management*, 5th edition. Ch. 3.

Sara Olsen, Clara Miller, & Coauthors. 2019. "A New Accounting System is Possible," *Stanford Social Innovation Review* 17(4): 59-60.

Jeffrey D. Sachs and Lisa E. Sachs. 2021. Business Alignment for the "Decade of Action," *Journal of International Business Policy* 4(1): 22-27.

Celine Dumas Atasa and Luk N. Van Wassenhove. 2021. "The Circular Business Model," *Harvard Business Review* 99(4): 72-81.

Optional (not required):

Matthew Kotchen. 2006. "Green Markets and Private Provision of Public Goods," *Journal of Political Economy* 114: 816-845.

Casey J. Wichman. 2016. "Incentives, Green Preferences, and Private Provision of Impure Public Goods," *Journal of Environmental Economics and Management* 79(3): 208-230.

Jody Grewal and George Serafeim. 2020. "Research on Corporate Sustainability: Review and Directions for Future Research." *Foundations and Trends in Accounting* 14 (2): 73-127.

III: The “Porter Hypothesis,” “Shared Value,” and the Nature of the Firm (Sept. 9th, 11th)

Lennox and Chatterji, Ch. 2.

Michael E. Porter and Claas van der Linde. 1995. “Toward a New Conception of the Environment-Competitiveness Relationship,” *Journal of Economic Perspectives* 9(4): 97-118.

Michael E. Porter and Mark R. Kramer. 2011. “Creating Shared Value,” *Harvard Business Review* 89(1/2): 62-77.

Stefan Ambec, Mark A. Cohen, Stewart Elgie and Paul Lanoie. 2013. “The Porter Hypothesis at 20: Can Environmental Regulation Enhance Innovation and Competitiveness?” *Review of Environmental Economics and Policy* 7(1): 2-22.

Andrew Crane, Guido Palazzo, Laura J. Spence, and Dirk Matten. 2014. “Contesting the Value of “Creating Shared Value,”” *California Management Review* 56(2): 130-153.

Mark R. Kramer and Marc W. Pfitzer. 2016. “The Ecosystem of Shared Value,” *Harvard Business Review* 94(10): 80-89.

Oliver Hart and Luigi Zingales. 2017. “Serving Shareholders Doesn’t Mean Putting Profit Above All Else,” *Harvard Business Review Digital Articles*.

Karthik Ramanna. 2020. “Friedman at 50: Is it Still the Social Responsibility of Business to Increase Profits?” *California Management Review* 62(3): 28-41.

Optional (not required):

Cesare Antonio Fabio Riillo. 2017. “Beyond the Question “Does it Pay to be Green?”: How Much Green? and When?” *Journal of Cleaner Production* 141(10): 626-640.

Oliver Hart and Luigi Zingales. 2017. “Companies Should Maximize Shareholder Welfare Not Market Value,” *Journal of Law, Finance, and Accounting* 2(2): 247-274.

IV: Social Drivers I—Citizen and Non-Citizen Demand (Sep. 16th, 18th)

Lennox and Chatterji, Ch. 5.

Delmas, Chs. 2-7.

Timothy Simcoe and Michael Toffel. 2014. “Government Green Procurement Spillovers: Evidence from Municipal Building Policies in California,” *Journal of Environmental Economics and Management* 68(3): 411-434.

Katherine White, David J. Hardisty, and Rishad Habib. 2019. “The Elusive Green Consumer,” *Harvard Business Review* 97(4): 81-89.

Edwin R. Stafford and Antje R.H. Graul. 2020. “Turning Consumers Green: From Green Marketing Myopia to Our 2020 Vision,” *Sustainability* 13(1): 10-21.

Korst, Jeremy. 2024. “Why Has the EV Market Stalled?” *Harvard Business Review Digital Articles*, p. 1-6.

Optional (not required):

Simon Kucher & Partners. 2024. *Sustainability 2024. Navigating Consumer Behavior*.

V: Social Drivers II and III—Environmental NGOs, Investors, and Access to Capital (Sept. 23rd, 25th, 30th, Oct. 2nd, Oct. 7th)

Lennox and Chatterji, Ch. 4.

John Elkington and Seb Beloe. 2010. “The Twenty-First Century NGO,” in *Good Cop, Bad Cop*.

Robert G. Eccles and Svetlana Klimenko. 2019. “The Investor Revolution,” *Harvard Business Review* 97(3): 106-116.

Amrou Awaysheh, et al. 2020. “On the Relation Between Corporate Social Responsibility and Financial Performance,” *Strategic Management Journal* 41(6): 965-987.

Sophie Hatte and Pamina Koenig. 2020. “The Geography of NGO Activism against Multinational Corporations,” *World Bank Economic Review* 34(1): 143-163.

Sarah Murray. 2020. “The Dawn of Responsible Finance,” *Stanford Social Innovation Review* 18(3): 20–27.

George Serafeim. 2021. “ESG: Hyperboles and Reality,” Harvard Business School Working Paper.

BusinessWire. 2022. Carl C. Icahn Files Definitive Proxy Statement and Issues Open Letter to Shareholders of McDonald's Corporation.

Andrew Winston. 2023. “ESG Is Under Attack. How Should Your Company Respond?” *Harvard Business Review Digital Article*.

Case 1:

Fossil Fuel Divestment. Harvard Business School Case 620093-PDF-ENG.

Case 2:

BlackRock's ESG Investment Dilemma: Managing Stakeholder Differences Case W83C14-PDF-ENG.

Optional (not required):

Giglio, Stefano Giglio, Bryan Kelly, and Johannes Stroebel. 2021. “Climate Finance,” *Annual Review of Financial Economics* 13: 15-36.

George Serafeim and Aaron Yoon. 2022. “Which Corporate ESG News Does the Market React To?” *Financial Analysts Journal* 78(1): 59-78.

Morgan Stanley. 2023. *Navigating the Next Decade: 10 Demand Signals for the Next 10 Years of Sustainable Finance*.

VI: Political Drivers—Regulation and Beyond (Oct. 16th, 21st)

James R. Kahn. 2005. *The Economic Approach to Environmental & Natural Resources*. Ch. 3.

Madhu Khanna, George Deltas, Donna Ramirez Harrington. 2009. “Adoption of Pollution Prevention Techniques: The Role of Management Systems and Regulatory Pressures,” *Environmental & Resource Economics* 44(1): 85-106.

Matt Gitsham. 2018. “Why Climate Change and Other Global Problems are Pushing Some Business Leaders to Embrace Regulation,” *Harvard Business Review Digital Articles*.

Alexei V. Ovtchinnikov, Syed Walid Reza, and Yanhui Wu. 2020. “Political Activism and Firm Innovation,” *Journal of Financial Activism and Quantitative Analysis* 55(3): 989-1024.

John Elkington. 2020. *Green Swans: The Coming Boom in Regenerative Capitalism*, Ch. 7.

Daniel C. Esty. 2020. “Creating Investment-Grade Corporate Sustainability Metrics,” in Esty and Cort (eds.), *Values at Work*.

Exam 1: Oct 23rd

VII: Economic Drivers I. Voluntary Programs (Oct. 28th, Oct. 30th)

Delmas, Ch. 8.

Joaquin Canon-de-Francia and Concepcion Graces-Ayerbe. 2009. "ISO14001 Environmental Certification: A Sign Valued by the Market?" *Environmental and Resource Economics* 44(2): 245-262.

Madhu Khanna and Keith Brouhle. 2009. "The Effectiveness of Voluntary Environmental Initiatives" in Delmas and Young, *Governance for the Environment*.

Nicole Darnall, Hyunjung Ji., and Matthew Potoski. 2017. "The Institutional Design of Ecolabels: Sponsorship Signals Rule Strength," *Regulation & Governance* 11(4): 438-450.

Joseph DeQuarto. 2019. "Strengthening Eco-Labeling Regulation," *The Regulatory Review*.

Cary Coglianese and Jennifer Nash. 2020. "Compliance Management Systems: Do They Make a Difference?" in *Cambridge Handbook of Compliance*.

Optional (not required):

Manuel Frondel, Karoline Krättschell, and Lina Zwick. 2018. "Environmental Management Systems: Does Certification Pay?" *Economic Analysis and Policy* 59 (3): 14-24.

George Deltas and Hui Wen. 2022. "Do Voluntary Corporate Activities Lead to Reporting Regulation? Evidence from Corporate Social Responsibility," *Applied Economics* 54(56): 6510-6520.

VIII: Economic Drivers II. Supply Chain Management (Nov. 4th, 6th)

Andreas Wieland and Robert Handfield. 2013. "The Socially Responsible Supply Chain: An Imperative for Global Corporations," *Supply Chain Management Review* 17(5): 22-29.

Daniel J. Fiorino and Manjot Bhan. 2016. "Supply Chain Management as Private Sector Regulation: What does it Mean for Business Strategy and Public Policy?" *Business Strategy and the Environment* 25(5): 310-322.

Andrew Spicer and David Hyatt. 2017. "Walmart's Emergent Low-Cost Sustainable Product Strategy," *California Management Review* 59(2): 116-141.

Patrick Burnson. 2019. "Greener Supply Chains = Greater Profit," *Supply Chain Management Review* 23(2): 12-13.

Verónica H. Villena and Dennis A. Gioia. 2020. "A More Sustainable Supply Chain," *Harvard Business Review* 98(2): 84-93.

MIT Center for Transportation & Logistics. 2023. *State of Supply Chain Sustainability 2023*.

Case: "Greening Walmart: Progress and Controversy," Harvard Business Case 316042.

IX: Economic Drivers III. Looking Inside the Firm (Nov. 11th, Nov. 13th)

Lennox and Chatterji, Ch. 3.

Suzanne Fallender. 2012. "Integrating Sustainability into Strategy, Governance and Employee Engagement," *MIT Sloan Management Review* 53(4): 1-3.

Pat Auger, et al. 2013. "How Much Does a Company's Reputation Matter in Recruiting?" *MIT Sloan Management Review* 55(3): 78-88.

CERES Roadmap 2030 Summary Report. 2020.

Robert G. Eccles, Mary Johnstone-Louis, Colin Mary, and Judith C. Stroehle, 2020. "The Board's Role in Sustainability," *Harvard Business Review* 98 (5):.48-51.

Robert A. Ritz. 2022. "Linking Executive Compensation to Climate Performance," *California Management Review* 64(3): 124-140.

BSR/GlobeScan. 2023. *State of Sustainable Business*.

Deloitte. 2023. *Engaged Employees are Asking their Leaders to Take Climate Action*.

Chenxing Jing, Kevin Keasey, and Bin Xu. 2023. "Environmental Sustainability and Employee Satisfaction," *Economics Letters* 233(1): Art. 111402.

Optional (not required):

Patricia Kanashiro. 2020. "Can Environmental Governance Lower Toxic Emissions? A Panel Study of U.S. High-Polluting Industries," *Business, Strategy and the Environment* 29(4): 1634-1646.

Oliver D. Hart and Luigi Zingales. 2022. "The New Corporate Governance," *University of Chicago Business Law Review* 1(1): 195-216.

X: Greenwashing (Nov. 18th, 20th)

Delmas, Ch. 8.

Eun-Hee Kim and Thomas P. Lyon. 2015. "Greenwash vs. Brownwash: Exaggeration and Undue Modesty in Corporate Sustainability Disclosure," *Organization Science* 26(3): 705-723.

Christopher. Marquis, Michael W. Toffel, and Yanhua Zhou. 2016. "Scrutiny, Norms, and Selective Disclosure: A Global Study of Greenwashing," *Organizational Science* 27(2): 483-504.

Francesco Testa, Ivan Miroshnychenko, Roberto Barontini, and Marco Frey. 2018. "Does it Pay to be a Greenwasher or a Brownwasher?," *Business Strategy and the Environment* 27(7): 1104-1116.

Donna Carmichael, Kazbi Soonawalla, Judith C. Stroehle. 2023. "Sustainability Assurance as Greenwashing," *Stanford Social Innovation Review* 21(1): 34–39.

Case: "Fiji Water and Corporate Social Responsibility," Ivey Case 909A08-PDF-ENG.

Optional (not required):

Bruce Watson. 2016. "The Troubling Evolution of Corporate Greenwashing," *The Guardian* <https://www.theguardian.com/sustainable-business/2016/aug/20/greenwashing-environmentalism-lies-companies>.

A. Wren Montgomery, Thomas P. Lyon, and Julian Barg. 2024. "No End in Sight? A Greenwash Review and Research Agenda," *Organization & Environment* 37(2): 221-256.

XI: The 800 lb. Gorilla: Climate Change (Nov. 25th, Dec. 2nd)

S. Pacala and R. Socolow. 2004. "Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies," *Science* 305: 968-972.

Sir Nicholas Stern. 2009. "Stern Review: The Economics of Climate Change: Executive Summary."

Andrew Winston. 2018. "The Scale of the Climate Catastrophe Will Depend on What Businesses Do Over the Next Decade." *Harvard Business Review Digital Articles*.

Business Roundtable. 2020. "Addressing Climate Change: Principles and Policies."

Robert Socolow. 2020. "Contending with Climate Change: The Next 25 Years," *Bulletin of the Atomic Scientists* 76(6): 294-301.

Lindsey Maisland. 2023. *Global Climate Agreements: Successes and Failures*.

Optional (not required, for background):

U.N Environmental Programme: Emissions Gap Report 2023.

XII: Conclusions and the Future of Green Markets (Dec. 4th and Dec. 9th [note latter may be cancelled])

Delmas, Ch. 9.

Lennox and Chatterji, Ch. 6.

John Elkington and Charmian Love. 2012. "Tomorrow's C-Suite Agenda," in *The Oxford Handbook of Business and the Natural Environment*.

Stuart L. Hart. 2012. "The Third-Generation Corporation," in *The Oxford Handbook of Business and the Natural Environment*.

Andrew J. Hoffman. 2018. "The Next Phase of Business Sustainability," *Stanford Social Innovation Review*, 16(2): 35–39.

Jason Hickel and Giorgos Kallis. 2020. "Is Green Growth Possible?" *New Political Economy* 25(4): 469-486.

Joseph Sarkis, Maurie J. Cohen, Paul Dewick, Patrick Schröder. 2020. "A Brave New World: Lessons from the COVID-19 Pandemic for Transitioning to Sustainable Supply and Production," *Resources, Conservation, & Recycling* 159 (Aug.).

World Business Council for Sustainable Development. 2021. *Vision 2050*.