

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

Grading: Grades are based on two “in-class” exams (using precautions relevant to our current situation; the latter is cumulative for the entire semester’s work) and a final project (1/3 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, suffice 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 others might say 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).

How the course will function: I will begin each class with some time for students (and for me) to discuss relevant events of the day. I encourage students to read 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 very nature of the course is such that it works best when we have the flexibility to proceed somewhat differently from initial plans.

All class meetings will be recorded on zoom. Please, if possible, come to the class either in-person or online, synchronically, as student discussion has always been a key component of the class. However, I recognize that my preferences must be balanced by your own personal needs in these trying times.

NOTE: Should events intervene—weather, sickness, etc.—I reserve the right to convene a makeup session. This will be done in a way taking into account student schedules in these difficult times.

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.: My office hours are Monday, 9:30-11:30. In this world of zoom, just contact me by email (lawrence.rothenberg@rochester.edu) and I will send you a link. 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 and I will try to respond asap. Finally, feel free to get in touch by e-mail about other things besides concerns narrowly tied to the class. The TA for the course is Jae Eun Kim (e-mail jae-eun.kim@rochester.edu), whose office hours are Weds. from 10-12. Again, Jae can be reached via e-mail and she will set up a zoom meeting, etc.

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 (Feb. 2nd)

Lennox and Chatterji, Ch. 1.

II: Basic Concepts (Feb. 4th, 9th)

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.

Jeffrey D. Sachs, et al. 2019. "Six Transformations to Achieve the Sustainable Development Goals," *Nature Sustainability* 2: 805-814.

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

World Business Council for Sustainable Development. 2020. *Circular Economy Action Plan (CEAP): 2020 Summary for Business*.

For the adventurous (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

III: The “Porter Hypothesis” and Shared Value (Feb. 11th, Feb. 16th)

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.

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

Additional (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.

IV: Social Drivers Ia—Citizen and Non-Citizen Demand (Feb. 18th, 23rd)

Lennox and Chatterji, Ch. 5.

Delmas, Chs. 2-7.

National Association of Educational Procurement. 2016. *2016 NAEP Green Procurement Survey Report*.

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.

V: Social Drivers II and III—Environmental NGOs, Investors, and Access to Capital (Feb. 25th; March 2nd, 4th)

Lennox and Chatterji, Ch. 4.

Mark P. Sharfman and Chitru S. Fernando. 2008. "Environmental Risk Management and the Cost of Capital," *Strategic Management Journal* 29(6): 569-592.

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): 108-116.

Amrou Awaysheh, Randall A. Heron, Tod Perry, and Jarel I. Wilson. 2020. "On the Relation Between Corporate Social Responsibility and Financial Performance," *Strategic Management Journal* 2018 41(6): 965-987.

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

The GlobeScan-SustainAbility Survey. 2020. "The 2020 Sustainability Leaders."

Cases:

1. Fossil Fuel Divestment. Harvard Business School Case 620093-PDF-ENG.
2. Morgan Stanley: Building Long-Term Sustainability. Harvard Business School Case 318103-PDF-ENG.

VI: Political Drivers—Regulation and Beyond (March 9th, 11th)

Winston Harrington, *et al.* 2004. *Choosing Environmental Policy*. Overview.

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*.

Julian Kirchherr, *et al.* 2018. “Barriers to the Circular Economy: Evidence from the European Union,” *Ecological Economics* 150: 264-272.

John Elkington. 2020. “Green Swans Take Off,” in Elkington, *Green Swans: The Coming Boom in Regenerative Capitalism*.

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

VII: Economic Drivers I. Voluntary Programs (March 16th, 18th)

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, “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*

Sylvaine Poret. 2019. “Corporate–NGO Partnerships through Sustainability Labeling Schemes: Motives and Risks,” *Sustainability* 11(9).

Additional (not required):

Manuel Frondel, Karoline Krättschell, and Lina Zwick. 2018. "Environmental management systems: Does certification pay?" *Economic Analysis and Policy* 59(3): 14-24.

Exam I March 23rd

VIII: (March 25th, April 1st). Economic Drivers II. Supply Chain Management.

Schell, Orville. 2011. "How Walmart is Changing China," *The Atlantic* Dec., 80-98.

Jira (Fern) Chonnikarn and Michael W. Toffel. 2013. "Engaging Supply Chains in Climate Change," *Manufacturing & Service Operations Management* 15(4): 559-577.

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.

Tannis Thorlakson, Joann F. de Zegherb, and Eric F. Lambinc. 2018. Companies' Contribution to Sustainability through Global Supply Chains," *PNAS* 115(9): 2072-2077.

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.

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

IX: (April 6th, 8th). Economic Drivers III. Looking Inside the Firm

Lennox and Chatterji, Ch. 3.

Suzanne Fallander. 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.

Nicholas Epley and Amit Kumar. 2019. "How to Design an Ethical Organization," *Harvard Business Review* 97(3): 144-150.

CERES Roadmap 2030 Summary Report. 2020.

BSR/GlobeScan. 2020. *State of Sustainable Business*.

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.

Robert G. Eccles, et al. 2020. "The Board's Role in Sustainability," *Harvard Business Review* 98(5): 48-51.

X: Greenwashing. (Apr. 13th, 15th)

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.

Bruce Watson. 2017. "The Troubling Evolution of Corporate Greenwashing," *Chain Reaction* #127.

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.

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

XI: The 800 lb. Gorilla: Climate Change. (Apr. 20th, 22nd, 27th)

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."

Business and Social Responsibility. 2016. "The Paris Agreement: What it Means for Business."

Robert Stavins. 2018. "Linkage will Prove Essential for Ultimate Success of Paris Agreement," *The Environmental Forum* 35(5): 15.

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.

Case: "Global Climate Change and BP," HBS Case 9-708-206.

Additional (for background, not required):

U.N Environmental Programme: Emissions Gap Report 2020.

XII: Conclusions and the Future of Green Markets. (Apr. 29th, May 4th)

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): 34-39.

Andrew Winston. 2018. "The Story of Sustainability in 2018: We Have About 12 Years Left," *Harvard Business Review Digital Article*.

Sanya Carley and David Konisky. 2019. "What Would the Green New Deal Mean for Businesses?" *Harvard Business Review* online.

Exam II. (May 6th)