

TO 560 & EAS 501: Sustainable Operations and Supply Chain Management

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Term: Winter (A) 2019

Tuesdays, 6:30-9:30pm (R1220)

COURSE OVERVIEW

Firms face increasing pressure from activists, investors, and customers to reduce the environmental impacts of their operations and supply chains as well as uphold basic human rights and labor standards for the people who produce the materials / components / products. At the same time, using a sustainability lens to study its operations and supply chain, a firm can identify new opportunities for improving efficiency and innovation. Further sustainability (environmental / social) as an artifact has to be combined with a discussion of responsibility. That is, how is responsibility (for ensuring sustainability) apportioned across the extended value chain that includes the end consumers? This course examines how to design and manage environmentally and socially responsible operations and supply chains.

Specific learning objectives for this course are:

- Develop an in-depth understanding of the key issues in designing and managing environmentally and socially responsible operations.
- Develop a critical understanding of the various environmental sustainability frameworks.
- Understand different metrics and tools to measure sustainability performance.
- Understand the multiple ways a firm can reduce its environmental impact.
- Learn how organizational structure affects a firm's approach to sustainability.
- Understand the unique challenges of managing upstream supply chains including building traceability, engaging suppliers, and improving capability.
- Understand the unique challenges of designing and managing reverse (post-consumer) supply chains.
- Learn the critical role of a firm's own internal management practices and its impact on the supply chain.
- Understand the challenges of scaling a sustainability initiative across an industry sector.
- Develop an appreciation for the need to take multi-stakeholder (activist, NGOs, government) & (same-sector, cross-sector, public-private) partnership approach to improving environmental and social performance.
- Understand the role of regulation.
- Understand the unique challenges of ensuring environmentally / socially responsible performance in a global (transnational) supply chain.
- Develop a deep understanding of the current dominant logic for ensuring labor standards and human rights and its failings and learn new approaches to ensure social responsibility in global supply chains.
- Learn how new technologies can be deployed to improve sustainability performance.
- Understand how sustainability can be a key driver of innovation.

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Reading List:

1. Case: Sustainability at Millipore (HBS Case 610-012)
2. Why Sustainability Is Now the Key Driver of Innovation, HBR, Sept 2009 (R0909E)
3. Michael W. Toffel, "Anticipating Greener Supply Chain Demands: One Singapore Company's Journey to ISO 14001," in *ISO 14001 Case Studies and Practical Experiences*, ed. R. Hillary (Sheffield, U.K.: Greenleaf Publishing, 2000): 182–199.
4. Emily Rochon and Paul Dickinson, "Are Corporate Carbon Intensity Targets Greenwash?" Ethical Corporation, March 2009.
5. Cook Composites and Polymers Co., HBSP 9-608-055, Rev. May 21, 2017
6. Michael W. Toffel and Stephanie van Sice, "Carbon Footprints: Methods and Calculations," HBS Note 611-075, 2011
7. Marian R. Chertow, "Industrial Symbiosis: Literature and Taxonomy," *Annual Review of Energy and the Environment* 25 (2000): 313–337.
8. McDonald's Corp.: Managing a Sustainable Supply Chain; HBS 907-414, 2007.
9. The Cage-Free Egg Movement; HBS Note 611-021, 2010.
10. Why Local Food Sourcing is so hard for restaurants. HBR. June 2016. (H02Y90-PDF-ENG)
11. Michigan Dining: 20% Local by 2025, WDI Publishing (3-589-225)
12. Wal-Mart's Sustainability Strategy (A) OIT71A-PDF-ENG.
13. Green Gold - an Innovative Sustainable Mining Scheme. SKE150-PDF-ENG on HBSP.
14. Dell: Upcycling Ocean Plastics Through Supply Chain Innovation, WDI Publishing (7-949-121)
15. Plastic waste inputs from land into the ocean, *Science*, Feb 2015
16. Getting to Grips with Take Back Laws (IIR045-PDF-ENG)
17. Voluntary Producer Responsibility for poly-coated packaging recycling (WDI Publishing 1-429-338)
18. The Detox Catwalk Explained. *Greepeace*.
19. PT Kizone: Adidas Battles Allegations of Shirking Responsibility to Workers (A). WDI Publishing. Case 1-429-306
20. PT Kizone: Adidas Battles Allegations of Shirking Responsibility to Workers (B). WDI Publishing. Case 1-429-403
21. Cam Simpson, "An iPhone Tester Caught in Apple's supply chain", *Business Week*, Nov 2013.
22. Raise the Curtain: Human Rights in Retail Supply Chains.