

RR, 1/12/2011

**Syllabus and Outline**  
[Subject to Change]

Business and the Environment  
ECON-UB.0225.01  
Roy Radner  
Spring 2012  
Tue and Thurs, 2 – 3:15 p.m  
Prerequisite: introductory microeconomics

Environmental problems typically arise from “market failures.” This seminar will examine several environmental issues at the local, national, and international levels, such as smog, acid rain, energy, water, fishing, and global climate change. Drawing on the theories of externalities, market failure, and mechanism design, we shall explore the causes of these problems, and some of the potential remedies, including government regulation, voluntary associations, treaties, and markets for emissions, as well as potential related business opportunities. Lectures and class discussions of assigned reading will be supplemented with presentations by outside speakers involved in environmentally related business ventures.

Textbook: Tietenberg, T., and L. Lewis, *Environmental Economics and Policy* (6<sup>th</sup> ed.). Addison-Wesley, Boston, 2009, (hereafter cited as TT).

Plus various articles, many of which are found in the following two collections:  
Stavins, R. N., ed., *Economics of the Environment: Selected Readings* (4<sup>th</sup> ed.). W. W. Norton, New York, 2000 (hereafter cited as EE).

Oates, W. E., ed., *The RFF Reader in Environmental and Resource Policy* (2<sup>nd</sup> ed.). Resources for the Future, Washington, DC, 2006 (hereafter cited as RFF).

Copies of most of these articles can be downloaded from JSTOR. I shall make arrangements to make the others available. Other references will be added during the semester, especially in the area of potential business opportunities.

Course grades will be based on class participation, a mid-term examination, and either a term paper or a final examination.

**Outline and Reading Assignments**

**1. Introduction**

TT, Ch. 1, 1-14.  
Fullerton, D., and R. Stavins (1998), “How Economists See the Environment,” *Nature*, 395, 6701 (EE, Ch. 1).  
Hardin, G. (1968), “The Tragedy of the Commons,” *Science*, 162, 1243-48 (EE, Ch. 2).

**2. , Air Pollution, I: Local and Regional**

TT, Chs. 14, 15, 301-349.  
Henderson, J. V. (1996). "Effects of Air Quality Regulation," *Amer. Econ. Review*, 86 (4), 789-813.

Stavins, R. N. (1998), "What Can We Learn from the Grand Policy Experiment? Lessons from SO<sub>2</sub> Allowance Trading," *J. of Economic Perspectives*, 12, 69-88 (EE, Ch. 22).

Sandel, M. J., "It's Immoral to Buy the Right to Pollute (with replies)," *N.Y. Times*, Dec. 15, 1997, p. A29.

*Supplementary:* Joskow, P. L, and R. Schmalensee (1988), "The Political Economy of Market-Based Environmental Policy: The U.S. Acid Rain Program," *J. of Law and Economics*, 41, 37-83 (EE, Ch. 28).

Schmalensee, R., *et al* (1998), "An Interim Evaluation of Sulfur Dioxide Emissions Trading," *J. of Economic Perspectives*, 12, 53-68 (EE, Ch. 21).  
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### **3. Valuing the Environment**

TT, Chapters 2-3, 15-63.

Portney, Paul R. (1994), "The Contingent Valuation Debate: Why Economists Should Care," *J. of Economic Perspectives*, 8, 3-17.

*Supplementary:*

Hanemann, W. Michael (1994), Valuing the Environment through Contingent Valuation," *J. of Economic Perspectives*, 8, 19-43.

### **4. Externalities, Market Failure, and Environmental Problems**

TT, Ch. 4-5, 554-89.

### **5. Environmental Economics: An Overview.**

TT, Ch. 14, 301-325.

### **6. Air Pollution, II: Transportation**

TT, Ch.17, 366-392.

Austin, D., and T. Dinan (2005). "Cleaning the Air: The Costs and Consequences of Higher CAFE Standards and Increased Gasoline Taxes," *J. of Environmental Economics and Management*, 50 (3), 562-582.

Espey, M., and S. Nair (2005). "Automobile Fuel Economy: What Is It Worth?" *Contemporary Economic Policy*, 23 (3), 1-7.

### **7. Natural Resource Economics: An Overview**

TT, Ch. 7, 128-139.

### **8. Energy (to be revised)**

TT, Ch. 8, 140-173.

Vaitheeswaran, V. V., Ch. 7 (pp. 194-219), *Power to the People*, Farrar, Strauss, and Giroux, New York, 2003.

### **9. Water**

TT, Ch. 9, 174-201.

(Other readings to be added.)

**10. Fishing.**

TT, Ch. 13, 272-300.

RFF, pp. 35-41, 61-62, 131-135.

White, L. J., "The Fishery as a Watery Commons: Lessons from the Experiences of Other Public Policy Areas for U.S. Fisheries Policy." Stern Econ. Dept., Nov. 2006

**11. Climate Change (to be revised)**

TT, Ch. 16, 350-365.

Aldy, J. E., et al (2010), "Designing Climate Mitigation Policy," *J. of Economic Literature*, vol. XLVIII, 903-934.

Nordhaus, W. D. (2007), "A Review of *The Stern Review of the Economics of Climate Change*, *J. of Economic Literature*, vol. XLV, no. 3, 686-702.

Weitzman, M. L. (2007). "A Review of *The Stern Review of the Economics of Climate Change*, *J. of Economic Literature*, vol. XLV, no. 3, 703-24.

Tol, R. S. J. (2006), "The Stern Review of the Economics of Climate Change," Economic and Social Research Institute, Hamburg, Oct. 30, 2006 (unpublished).

*Supplementary:*

Jacoby, H., et al (1998), "Kyoto's Unfinished Business," *Foreign Affairs*, 77, 54-66 (EE, Ch. 24).

Nordhaus, W. D. (1993), "Reflections on the Economics of Climate Change," *J. of Economic Perspectives*, 7, 11-25 (EE, Ch. 22).

Schelling, T. C. (1997), "The Cost of Combating Global Warming: Facing the Tradeoffs," *Foreign Affairs*, 76, 8-14 (EE, Ch. 23).

Radner, R. (2001), "Notes on Noncooperative Game Theory," Econ. Dept., Stern School, NYU (unpublished).

Dutta, P. K., and R. Radner (2004), "Self-Enforcing Climate-Change Treaties," *Proc. National Academy of Sciences of the U.S.*, 101, 4746-4751.

**12. The Population Problem**

TT, Ch. 6, 104-127.

**13. Sustainable Development**

TT, Ch. 5, 90-103; Ch. 21, 477-508; Ch. 22, 509-518.

**Supplementary References (to be revised)**

Vaitheeswaran, Vijay V., *Power to the People*, New York: Farrar, Strauss, and Giroux, 2003.

Smil, Vaclav, *Energy at the Crossroads*, Cambridge, MA: The MIT Press, 2003.

The following references contain case studies on environmentally efficient and socially responsible companies that are profiting from their integration of those principles with profitability.

Heal, Geoffrey M., *Corporate Environmentalism: Doing Well by Being Green* (August 2007). Available at SSRN: <http://ssrn.com/abstract=1009755>.

Paul Hawken, Amory Lovings, L. Hunter Lovins, *Natural Capitalism – Creating the next Industrial Revolution*. Back Bay Books, 2000.

William McDonough and Michael Braungart, *Cradle to Cradle – Remaking the way we make things*. New York: North Point Press, 2002.

James A. Fava, Cynthia L Figge, Konrad Saur, Steven B. Young, *Mapping the Journey – Case studies in strategy and action toward sustainable development*. Sheffield: Greenleaf Publishing, 1999.

Gary Erickson with Lois Lorentzen, *Raising the Bar – Integrity and Passion in Life and Business*. San Francisco: Jossey-Bass, 2004.

Yvon Chouinard, *Let my people go surfing – the education of a reluctant businessman*, New York: Penguin Press, 2005.