

University of Southern California Environmental Studies Program
ENST-520 Spring 2012
Environmental Law and Policy
Time: TTH 3:30pm-4:50pm
Location: TTH 109

Instructor: Dr. Juliana Qiong Wang
Email: juliana.wang@usc.edu
Office Hours: Friday 11am-12pm
Office Location: SOS B-15

Course Description:

The environmental decisions that the world's fastest growing economy makes today will shape what our whole planet looks like tomorrow. What are the factors that influence environmental law and policy when so much is at stake? This class provides an overview of the foundations of environmental law and policy in the context of China. We will explore the theories and analytical tools behind environmental law and policy decision and study topics such as property rights, externalities, and benefit cost analysis. These theories will be studied in conjunction with Chinese environmental law and policy. Topics include energy policy, restructuring of the electricity sector, air pollution, forest management, agriculture, urbanization, transportation, water, fiscal reform, green technology, engagement of the civil society, and environmental governance, etc.

Course Objectives:

Students will be exposed to the economic tools and issues that affect environmental law and policy. Students will also learn how to apply these tools to analyze environmental and natural resource management policies in China. Students will be trained to engage in scholarly research by presenting journal articles and write scholarly papers. Students will sign up for topics and present to the class what they have learned from reading the journal articles. Many of these journal articles were written by Chinese scholars, which in themselves provide interesting perspectives of environmental philosophy in China.

Readings:

1. Journal articles are provided in the reading schedule.
2. The following resources are recommended as background reading.

Tietenberg & Lewis. 2010. *Environmental Economics and Policy*, 6th edition. ISBN: 9780321599490.

McElwee, Charles R. 2011. *Environmental Law in China: Mitigating Risk and Ensuring Compliance* (Oxford University Press, 2011).

Naughton, B. 2007. *The Chinese economy: Transitions and growth*. Cambridge, MA: MIT Press.

Day, Kristen, ed. *China's Environment and the Challenge of Sustainable Development*. NY: Columbia University Press, 2005.

Economy, Elizabeth. *The River Runs Black: The Environmental Challenge to China's Future*. NY: Cornell University Press, 2004.

Ma, Xiaoying and Leonard Ortolano. *Environmental Regulation in China: Institutions, Enforcement, and Compliance*. NY: Rowman and Littlefield Publishers, 2000.

Shapiro, Judith. *Mao's War Against Nature: Politics and the Environment in Revolutionary China*. NY: Cambridge University Press, 2001.

China Environment Forum, Woodrow Wilson International Center for Scholars, http://www.wilsoncenter.org/index.cfm?topic_id=1421&fuseaction=topics.home

Working Group on Environment in U.S.-China Relations, 2001. "Bibliography" in *China Environment Series*, issue 4. Washington, DC: Woodrow Wilson International Center for Scholars. <http://ecsp.si.edu/PDF/CES4-bibliography.pdf>.

Chinadialogue
<http://www.chinadialogue.net/>

China Environmental Governance (VLS' US-China Partnership For Environmental Law), <http://chinaenvironmentalgovernance.com/>

China Environmental Law (<http://www.chinaenvironmentallaw.com/>; especially useful for unofficial translations of Chinese environmental laws – see "Laws & Regulations" – as are the sources mentioned on p. 12 of the McElwee coursebook)

U.S. EPA—China Environmental Law Initiative,
http://www.epa.gov/ogc/china/initiative_home.htm

Grading

Attendance and Class Participation	10%
Reports	30%
Presentations	30%
Critiques	30%

Attendance and class participation is critical to success in this course. Participation means arriving on time, having done the reading, and being prepared to discuss the day's content. Students will also sign up for topics to present. The topics are either tools or issues related to environmental law and policy.

Statement on Academic Integrity:

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *SCampus*, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: <http://web-app.usc.edu/scampus/>. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>.

Religious Observance:

Students may wish to take part in religious observances during the semester. If students have a religious observance that conflicts with the participation in the course, they are required to speak with the instructor *before the end of the second week* of the semester to discuss appropriate accommodations.

Statement for Students with Disabilities:

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

Course Outline and Reading Schedule:

Wk	Date	Topics and Readings (Background readings are optional)
Overview		
1	1/10 T	Sustainability and Dynamic Efficient Policies <i>Background Readings:</i> TL Chapter 1. Visions of the Future TL Chapter 5. Sustainable Development Alaska Permanent Fund http://www.apfc.org/home/Content/home/index.cfm http://www.pfd.state.ak.us/
	1/12	Economic Foundations of Environmental Law and Policy

Th

Papers:

Easter Island

Brander, J.A. and M.S. Taylor (1998). "The Simple Economics of Easter Island: A Ricardo-Malthus Model of Renewable Resource Use," *American Economics Review* 88(1): 119-138

Nauru

Gowdy, J.W. and G.N. McDaniel, "The Physical Destruction of Nauru: An Example of Weak Sustainability," *Land Economics* 75(2) 1999:333-338

Should we put a dollar value on the environment?

Costanza, R. *et al.*, "The Value of Ecosystem Services: Putting the Issues in Perspective" *Ecological Economics* 25 (1998) (1): 67-72

Other articles in that issue on valuation can also be helpful.

Background Readings:

TL Chapter 2. Valuing the Environment: Concepts

TL Chapter 3. Valuing the Environment: Method

2

1/17

T

Property Rights and Externalities

Papers:

Shrimp Farming Externalities

Suthawan Sathirathai and Edward B. Barbier, "Valuing Mangrove Conservation in Southern Thailand," *Contemporary Economic Policy* (19)2, April 2001: 109-122.

Role of Property Rights

Lueck, Dean. "The Extermination and Conservation of the American Bison," *Journal of Legal Studies* (2002)

Market Forces

Stavins, Robert N. "Harnessing Market Forces to Protect the Environment," *Environment* 31 (1989): 4-7, 28-35.

Background Readings:

TL Chapter 4. Property Rights, Externalities, and Environmental Problems

1/19

Th

Property Rights and Governance in China (Presentations)

Papers:

Peter Ho. March 2000. The Clash over State and Collective Property: The Making of the Rangeland Law. *The China Quarterly* 161, pp. 240-263.

Stalley (Philip), Yang (Dongming). "An Emerging Environmental Movement in China?" *The China Quarterly*, Jun 2006, p. 333-356.

Economy, Elizabeth. 2005. "China's Environmental Challenge." *Current History* 104(683): 278.

Robert Louis Edmonds. 1998. "Studies on China's Environment." *The China Quarterly* no.156, December 1998.

Background Reading (optional):

Judith Shapiro, 2001. *Mao's War Against Nature*. Cambridge: Cambridge University Press.

Energy (Electricity)

3 1/24 The Natural Resource and Global Energy Challenge

T

Papers

Energy-Development Connection

Judson, R. A., Schmalensee, R., & Stoker, T. M. (1999). Economic development and the structure of the demand for commercial energy. *The Energy Journal*, 20(2), 29-57.

Resource Availability

Kakela, Peter J., "Iron Ore: Energy Labor and Capital Changes with Technology," *Science* 202 (December 15, 1978): 1151-1157

Kakela, Peter J., "Iron Ore: From Depletion to Abundance," *Science* 212 (April 10, 1981): 132-136

Background Readings:

TL Chapter 7. Natural Resource Economics

TL Chapter 8. Energy

1/26 China's Energy Policy

Th

Papers:

Rosen, D.H., and T. Houser. 2007. *China Energy: A Guide for the Perplexed*, Peterson Institute for International Economics, Washington, DC. Available at <http://www.iie.com/publications/papers/rosen0507.pdf>

Joel B. Eisen, "China's Renewable Energy Law: A Platform for Green Leadership" 35

William and Mary Environmental Law and Policy Review. 1 (2010) (available on Lexis and Westlaw).

Fisher-Vanden, K., 2003. "The effects of market reforms on structural change: implications for energy use and carbon emissions in China." *The Energy Journal*, 24(3): 27-36.

Nan Zhou et al., *China's Energy and Carbon Emissions Outlook to 2050*, available at <http://china.lbl.gov/sites/china.lbl.gov/files/>

4

1/31
T

Electricity I: Restructuring

Papers:

Wirtshafter, R., and Shih, E., 1990. "Decentralization of China's Electricity Sector: Is Small Beautiful?" *World Development*, 18 (4): 505-512.

OECD/IEA (International Energy Agency). 2006. *China's power Sector Reforms: Where to Next?* Paris: OECD.

Xu, Shaofeng, and Wenying Chen, 2006. "The Reform of Electricity Power Sector in the PR of China." *Energy Policy*, 34: 2455-2465.

Background Reading:

Xu, Yi-Chong. 2004. *Electricity Reform in China, India and Russia: The World Bank Template and the Politics of Power*. Northampton, MA: Edward Elgar.

2/1
Th

Electricity II: Production, Demand, and Demand Side Management (Presentations)

Papers:

World Bank. 2005. "Demand-Side Management in China's Restructured Power Industry: How Regulation and Policy Can Deliver Demand-Side Management Benefits to a Growing Economy and a Changing Power System." Energy Sector Management Assistance Program. Available at <http://www.worldbank.org/research/2005/12/6743254/demand-side-management-chinas-restructured-power-industry-regulation-policy-can-deliver-demand-side-management-benefits-growing-economy-changing-power-system>

Natural Resources Defense Council. 2003. "Demand Side Management in China: Benefits, Barriers, and Policy Recommendations." Available at www.nrdc.org/air/energy/chinadocs/dsm.pdf

Steenhof, P., and W. Fulton. 2006. "Factors Affecting Electricity Generation in China: Current Situation and Prospects." *Technological Forecasting and Social Change*. 2006.

5 2/7
T **Electricity III: Competition, Shortages, and Renewable Portfolio**

Papers:

Jeffrey H. Michel (2007), “The Case for Renewable Feed-In Tariffs” Online Journal of the EUEC, Volume 1, Paper 1, available at <http://www.euec.com/journal/Journal.htm>

Langniss, O. and R. Wiser, “The Renewables Portfolio Standard in Texas: An Early Assessment,” *Energy Policy* 31, 2003: 527-535

Pittman, R. and V. Zhang. 2008. *Electricity Restructuring in China: The Elusive Quest for Competition*. Economics Analysis Group Discussion Paper, Antitrust Division, U. S. Department of Justice. Available at <http://www.justice.gov/atr/public/eag/232668.pdf>

Thompson, E. 2005. “Power Shortages in China: Why?” *China: An International Journal*, 3(1): 155 -- 171.
Available at <http://muse.jhu.edu/journals/china/v003/3.1thomson.pdf>

Wang, B., 2007. *An Imbalanced Development of Coal and Electricity Industries in China*. *Energy Policy*, 35(10): 4959-4968.

Ma, C., and L. He. 2008. *From State Monopoly to Renewable Portfolio: Restructuring China's Electric Utility*. *Energy Policy*, 36: 1697-1711.

Air Pollution

5 2/9
Th **Efficiency of Pollution Policies**

Papers:

Bohm, Robert et al., “Environmental Taxes: China’s Bold Initiative,” *Environment* 40 (7): September 1998, 10-13, 33-38

Dasgupta, Susmita, Hua Wang, and David Wheeler, “Surviving Success: Policy Reform and the Future of Industrial Pollution in China” *World Bank Policy Research Paper* No. 1856. (Washington, DC: The World Bank, 1997).

Book Chapter (optional):

Stern, T., *Policy Instruments for Environmental and Natural Resource Management*. (Washington, DC: Resources for the Future, 2003): 286-288.

Background Readings:

TL Chapter 14. Environmental Economics: An Overview

TL Chapter 15. Stationary-Source Local and Regional Air Pollution

6 2/14 **Air Quality in China**
T

Papers:

Gao, C., 2009. "Historical Analysis of SO₂ Pollution Control Policies in China." *Environmental Management*, 43:447-457.

Streets, David G. et al. 2007. "Air Quality during the 2008 Beijing Olympic Games." *Atmospheric Environment* 41(3): 480-492

Zhao, Yu et al. 2008. "Primary Air Pollutant Emissions of Coal-fired Power Plants in China: Current Status and Future Prediction." *Atmospheric Environment* 42(36): 8442-8452.

2/16 **Mercury**
Th

Papers:

Streets, David G. et al. 2005. *Anthropogenic Mercury Emissions in China*. *Atmospheric Environment* 39(40): 7789-7806.

Steding, D.J. and A.R. Flegal. 2002. *Mercury Concentrations in Coastal California Precipitation: Evidence of Local and Trans-Pacific Fluxes of Mercury to North America*. *Journal of Geophysical Research* 107(D24): 4764.

Seigneur, C. et al. 2004. *Global Source Attribution for Mercury Deposition in the United States*. *Environmental Science & Technology* 38(2): 555–569.

Environmental Governance and Civil Society

7 2/21 **Environmental Governance**
T

Papers:

Dasgupta, S., B. Laplante, N. Mamingi, and H. Wang. 2001. *Inspections, pollution prices, and environmental performance: Evidence from China*. *Ecological Economics* 36(3): 487-98.

Wang , H. et al. 2004. *Environmental Performance Rating and Disclosure: China's GreenWatch Program*. *Journal of Environmental Management* 71(2): 123-33.

Wang Canfa, *Chinese Environmental Law Enforcement: Current Deficiencies and Suggested Reforms*. *Vermont Journal of Environmental Law*, vol. 8, 2006-2007, <http://www.vjel.org/journal/VJEL10058.html>

2/23
Th **Environmental NGOs**

Papers:

Ho, P. 2001. *Greening without conflict? Environmentalism, NGOs and Civil Society in China*. Development and Change 32(5): 893-921.

Saich, T. 2000. *Negotiating the State: The Development of Social Organization in China*. China Quarterly 161: 12-141.

Schwartz, J. 2004. *Environmental NGOs in China: Roles and Limits*. Pacific Affairs 77(1): 28-49.

Common-Pool Resources and Biodiversity

8 2/28
T **Conservation Efforts**

Papers:

Harris, Richard B. and Daniel H. Pletscher. 2002. *Incentives toward Conservation of Argali Ovis Ammon: A Case of Trophy Hunting in Western China*. Oryx 36(4): 373-81.

Z. Xu, J. Xu, X. Deng, J. Huang, E. Uchida, S. Rozelle. 2006. *Grain for green versus grain: Conflict between food security and conservation set-aside in China* World Development, 34 (2006), pp. 130–148

Liu, Jianguo et al. 2001. *Ecological Degradation in Protected Areas: The Case of Wolong Nature Reserve for Giant Pandas*. Science 292(5514): 98-101.

Book (optional):

Harris, Richard B. 2008. *Wildlife Conservation in China: Preserving the Habitat of China's Wild West*. London: East Gate Books.

3/1
Th **Biodiversity and Ecosystem Services**

Papers:

Liu, Jianguo, Zhiyun Ouyang, Stuart L. Pimm, Peter H. Raven, Xiaoke Wang, Hong Miao, and Nianyong Han. 2003. *Protecting China 's Biodiversity*. Science 300: 1240-1241.

Liu, Jianguo, Gretchen C. Daily, Paul R. Ehrlich, and Gary W. Luck. 2003. *Effect of Household Dynamics on Resource Consumption and Biodiversity*. Nature 421: 459- 558.

Liu, Jianguo, Shuxin Li, Zhiyun Ouyang, Christine Tam, and Xiaodong Chen. 2008. *Ecological and Socioeconomic Effects of China's Policies for Ecosystem Services*. PNAS 105(28): 9477-9482.

Land Use, Agriculture, Forestry and Transportation

9 3/6
T **Land Use**

Papers:

Marcy Burchfield, Henry Burchfield, Diego Puga, and Matthew Turner, “Causes of Sprawl: A Portrait from Space,” *Quarterly Journal of Economics*, May 2006.

Barbier, E.B. “The Economic Determinants of Land Degradation in Developing Countries” *Philosophical Transactions of the Royal Society: Biological Sciences* (1997) 352: 891-899

Background Reading:

TL Chapter 10. Land

Robert C. Anderson, and Andrew Q. Lohof, *The United States Experience with Economic Incentives in Environmental Pollution Control Policy* (Washington, DC: Environmental Law Institute, 1997)

US EPA “International Experiences with Economic Incentives for Protecting the Environment” Available at:

[http://yosemite.epa.gov/ee/epa/erm.nsf/vwAN/EE-0487-01.pdf/\\$file/EE-0487-01.pdf](http://yosemite.epa.gov/ee/epa/erm.nsf/vwAN/EE-0487-01.pdf/$file/EE-0487-01.pdf)

3/8
Th **Agriculture**

Papers:

Golan, Elise et al., “The Economics of Food Labeling,” *Journal of Consumer Policy*,

24(2), 2001: 117-184

Batie, Sandra S., "The Environmental Impacts of Genetically Modified Plants: Challenges to Decision-Making," *American Journal of Agricultural Economics* 85 (5), 2003: 1107-1111

Noussair, Charles, Stephane Robin, and Bernard Ruffieux, "Do Consumers Really Refuse to Buy Genetically Modified Food?" *The Economic Journal*, 114 (January 2004) 102-120

Background Reading:

TL Chapter 11. Agriculture

10 3/12- *Spring Recess*
 3/17

11 3/20 **Managing Forests**
 T

Background Reading:

TL Chapter 12. Forests

3/22 **Urbanization, Land Use Change, and Agriculture in China**
Th

Papers:

Pils, Eva. 2010. *Waste No Land: Property, Dignity and Growth in Urbanizing China*. Asian-Pacific Law & Policy Journal Vol11:2
http://www.hawaii.edu/aplpj/articles/APLPJ_11.2_pils.pdf

Ma, H.Y., J. K. Huang, and S. Rozelle. 2004. *Reassessing China's Livestock Statistics: an Analysis of Discrepancies and the Creation of New Data Series*. *Economic Development and Cultural Change* 52: 445-473.

Fischer, G., T. Ermolieva, Y. Ermoliev and L. Sun. 2008. *Risk-adjusted Approaches for Planning Sustainable Agricultural Development*. *Stochastic Environmental Research and Risk Assessment* 23(4): 441-50.

Wang, R. (2011), *Environmental and Resource Sustainability of Chinese Cities: A Review of Issues, Policies, Practices and Effects*. *Natural Resources Forum*, 35: 112–121.

12 3/27 **Forest Land Tenure and Grain for Green Policy**
 T

Papers:

Xu, Jintao, Andy White, and Uma Lele. 2010. *China's Forest Land Tenure Reform: Impacts and Implications for Choice, Conservation and Climate Change*. Washington:

Rights and Resources Initiative. Available at
http://www.rightsandresources.org/publication_details.php?publicationID=1406

Uchida, E., et. al., *Grain for Green: Cost-Effectiveness and Sustainability of China's Conservation Set-Aside Program*. Land Economics v. 81 no. 2 (May 2005) p. 247-64

Qin, P., et. al., *Forest Tenure Reform in China: A Choice Experiment on Farmers' Property Rights Preferences*. Land Economics v. 87 no. 3 (August 2011) p. 473-87

Xu, J., et. al., *China's Sloping Land Conversion Program: Does Expansion Equal Success?*. Land Economics v. 86 no. 2 (May 2010) p. 219-44

3/29 **Guest Lecture: Transportation Policy in China**
Th

Speaker: Dr. Feng AN, President, Innovation Center for Energy and Transportation (iCET)

Background Reading:
TL Chapter 17. Transportation

Water Resource Management

13 4/3 **Water Resources and Water Pollution**
T

Papers:

Leston, D. "Power/Nonpoint Source Pollution Reduction Trading: An Interpretive Survey," *Natural Resource Journal* 32 (1992): 219-232.

Bennett, Lynne Lewis, Steven G. Thorpe, and A. Joseph Guse. "Cost-Effective Control of Nitrogen Loadings in Long Island Sound," *Water Resources Research* 36 (2000): 3711-3720.

Bockstael, N.E. et al. "Measuring the Benefits of Improvements in Water Quality: The Chesapeake Bay," *Marine Resources Economics* 6 (1989): 1-18

Boyd, J. "Water Pollution Taxes: A Good Idea Doomed to Failure?" *Public Finance and Management* 3 (2003) (1): 34-66

Background Reading:
TL Chapter 18. Water Pollution
TL Chapter 9. Water

4/5
Th **Water Resource Management in China**

Papers:

Yuling, S. and Lein, H. (2010), Treating water as an economic good: policies and practices in irrigation agriculture in Xinjiang, China. *The Geographical Journal*, 176: 124–137.

Webber, M. (2011), The Political Economy of the Three Gorges Project. *Geographical Research*.

M. Webber, J. Barnett, B. Finlayson and M. Wang. 2008. *Pricing China's Irrigation Water*. *Global Environ. Change*, 18 4 (2008), pp. 617–625.

Background Reading:

Economy, Elizabeth. *The River Runs Black: The Environmental Challenge to China's Future*. NY: Cornell University Press, 2004.

Population

14 4/10
T **Population, Poverty, and the Environment**

Papers:

Kelly, Allen C. "Economics Consequences of Population Change in the Third World," *Journal of Economic Literature* Vol. 26 (December 1988): 1685-1728.

Case of Kerala

S. Irudaya Rajan and K.C. Zachariah, "Long-Term Implications of Low Fertility in Kerala, India," *Asia-Pacific Population Journal* (13)3, 1998: 41-66

Rene Veron, "The 'New' Kerala Model: Lessons for Sustainable Development," *World Development* (29) 4, April 2001: 601-617.

Readings:

TL Chapter 6. The Population Problem

TL Chapter 20. Development, Poverty, and the Environment

TL Chapter 21. The Quest for Sustainable Development

4/12
Th **Population Policy in China**

Papers:

Rozelle, Huang and Zhang. *Poverty, Population and Environmental Degradation in*

China. Food Policy Volume 22, Number 3, June 1997, pp. 229-253.

Peng Yu, 1994. *China's Experience in Population Matters: An Official Statement* Population and Development Review, Vol. 20, No. 2 (Jun., 1994), pp. 488-491

Rosenzweig, M.R. and Zhang, J. 2009. *Do Population Control Policies Induce More Human Capital Investment? Twins, Birth Weight and China's "One-Child" Policy*. Review of Economic Studies, 76: 1149–1174.

Carole J. Petersen. *Population Policy and Eugenic Theory: Implications of China's Ratification of the United Nations Convention on the Rights of Persons with Disabilities*. China: An International Journal 8.1 (2010): 85-109. Project MUSE. Web. 22 Jan. 2011. <<http://muse.jhu.edu/>>.

Domestic and International Dimensions of Environmental Policy

15 4/17 Fiscal Policy, Decentralization and the Environment T

Papers:

Jin, H., Qian Y., and B. Weingast. 2005. *Regional Decentralization and Fiscal Incentives: Federalism, Chinese Style*. Journal of Public Economics, 89: 1719-1742.

Qian, Yingyi, Gerard Roland, and Chenggang Xu. 2006. *Coordination and Experimentation in M-Form and U-Form Organizations*. Journal of Political Economy, 114 (2): 366-402

Parker, Elliot, and Judith Thornton. 2007. *Fiscal Centralization and Decentralization in Russia and China*. Comparative Economic Studies, 49:514-542.

Cao, Y., Qian Y., and B. Weingast. 1999. *From Federalism, Chinese Style to Privatization, Chinese Style*. Economics of Transition, 7(1), 103-131

4/19 International Agreements Th

Papers:

Weber, Christopher L., Glen P. Peters, Dabo Guan, and Klaus Hubacek. 2008. *The contribution of Chinese Exports to Climate Change*. Energy Policy 36: 3572-3577.

Zhao, Jimin., Ortolano, Leonard, *The Chinese Government's Role in Implementing Multilateral Environmental Agreements: The Case of the Montreal Protocol*, *The China Quarterly*, September 2003, p. 708-725.

Optional:

Yu, Hongyuan. *Global Warming and China's Environmental Diplomacy*. Nova Science Publisher, 2008

Industrial Sustainability and GreenTech

16 4/24 **Industrial Sustainability, Green GDP, and Circular Economy**
 T

Papers:

Fang, Yiping and Raymond Cote. 2007. *Industrial Sustainability in China: Practice and Prospects of Eco-industrial Development*. Journal of Environmental Management 83(3): 315-328.

Geng, Yong and Brent Doberstein. 2008. *Developing the Circular Economy in China: Challenges and Opportunities for Achieving "Leapfrog Development."* International Journal of Sustainable Development and World Ecology 15(3): 231-9.

Ding, Ding and Dongbao Dai. 2008. *Development of a Low-carbon Economy in China*. International Journal of Sustainable Development and World Ecology 15(4): 331-6.

4/26 **Green Revolution**
Th

Papers:

The China Greentech Report 2011, available at <http://www.china-greentech.com/report> (free registration required for download)

McKinsey & Co., China's Green Revolution: Prioritizing Technologies to Achieve Energy and Environmental Sustainability (2009), available at http://www.mckinsey.com/locations/greaterchina/mckonchina/reports/china_green_revolution_report.pdf

Final Reports Due May 8th at 2pm (IN LIEU OF FINAL)