

SYLLABUS FOR CLIMATE CHANGE LAW & POLICY

U.C. BERKELEY SCHOOL OF LAW - FALL 2007

Instructors: Daniel Farber, Cymie Payne, Richard Frank
Boalt Hall, Room 14
2 units
Tuesday, 2:20-4:10 pm

Climate change will be a core concern that will influence policy and economic activity for years to come. It raises classic issues of distributional justice, law and science, risk, uncertainty and precaution, litigation strategy, technology policy, and international relations. Students will leave this course with an understanding of the sources and impacts of climate change, the key state, national and international policies, and the role of law.

Course will be graded on:

- 10% Attendance and participation in class
- 20% Lead class discussion
- 70% Papers

Each member of the class will prepare to lead two class discussions and will write a “reaction” paper, about five pages, providing analysis and critique of the reading for three classes – the two classes for which you are a discussion leader plus one more of your choice. The reaction papers will be due on the day of that class. In addition, each student will develop one of the short papers into a longer piece of writing, about fifteen pages, that will be due on the first day of the final exam period.

Required Texts:

Gerrard, M. B., Ed. (2007). *Global Climate Change and U.S. Law*, ABA.
Kolbert, E. (2006). *Field notes from a catastrophe: man, nature, and climate change*, New York: Bloomsbury.

Class 1- August 21 **Introduction to the Course** [Farber, Payne, Frank]

Guest: Inez Fung (Co-Director, Berkeley Institute of the Environment)

Reading: 1. Gerrard, M. B., Ed. (2007). *Global Climate Change and U.S. Law*, ABA. Chapter 1
2. Kolbert, E. (2006). *Field notes from a catastrophe*, New York: Bloomsbury.
Chapters 1, 2 & 5

Supplemental Reading (optional):

1. Intergovernmental Panel on Climate Change (2007) - Fourth Assessment Report (AR4). *The Reports from Working Groups I, II and III are available at:*
<http://www.ipcc.ch/>.
2. Weart, Spencer. (2004). *The Discovery of Global Warming*. Harvard University Press. Available on-line: <http://www.physicists.org/history/climate>.

Additional Resources:

1. IPCC Working Group I. <http://ipcc-wg1.ucar.edu/wg1/wg1-report.html>
2. IPCC Working Group II. <http://www.ipcc-wg2.org/>

3. IPCC Working Group III. http://www.mnp.nl/ipcc/pages_media/AR4-chapters.html

Class 2 – August 28 **Dealing with the Consequences – Adaptation** [Farber]

Guest: Michael Hanemann (Chancellor's Professor of Public Policy, U.C. Berkeley)

Reading: 1. "Global Climate Change and California: Potential Implications for Ecosystems, Health, and the Economy" (August 2003), focusing on the discussions of sea level change and water supply.

http://www.climatechange.ca.gov/research/impacts/pdfs/2003-10-31_500-03-058CF.pdf

Additional Resources:

1. Stern Review Report on the Economics of Climate Change - http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm

Class 3 – Sept 4 **Dealing with the Consequences – Disasters** [Farber]

Guest: William Collins (Professor of Earth and Planetary Science, Lawrence Berkeley National Laboratory)

Reading: 1. Collins, W., et al. (2007). "The Physical Science behind Climate Change." *Scientific American* (August 2007).

and two of the following:

1. Emmanuel, K. (2005). "Increasing destructiveness of tropical cyclones over the past 30 years." *Nature* 436(4 August 2005): 686-88.

Pielke, R. (2005). "Are there trends in hurricane destruction? - Arising from K. Emmanuel *Nature* 436, 686-688 (2005)." *Nature* 438(22/29 December 2005): E11.

Emmanuel, K. (2005). "Emmanuel replies." *Nature* 438(22/29 December 2005): E13.

2. Rahmstorf, S., et al. (2005). "Hurricanes and Global Warming - Is There a Connection?" <http://www.realclimate.org/index.php?p=181>

3. Oppenheimer, M. (2006). "Ice Sheets and Sea Level Rise: Model Failure is the Key Issue". <http://www.realclimate.org/index.php/archives/2006/06/ice-sheets-and-sea-level-rise-model-failure-is-the-key-issue/>

4. "Storm World: A Review". (2007).

<http://www.realclimate.org/index.php/archives/2007/06/storm-world/>

5. Kolbert - Afterword, pp. 191-199

Supplemental Reading (optional):

1. Reading primary scientific literature.

Class 4 – Sept 11 **UN Framework Convention on Climate Change, Kyoto Protocol** [Payne]

Guest: David Caron (C. William Maxeiner Distinguished Professor of Law, U.C. Berkeley School of Law)

Reading: 1. Gerrard, Chapter 2, "The International Regime," for an overview of the international climate change agreements.

2. UN Framework Convention on Climate Change

http://unfccc.int/essential_background/convention/background/items/2853.php

3. Kyoto Protocol. http://unfccc.int/kyoto_protocol/items/2830.php.

4. Treaty Reading Exercise

Supplemental Reading (optional):

1. Kolbert, Chapter 8, "The Day after Kyoto".

2. Fourth Climate Action Report to the UN Framework Convention on Climate Change. (2007). <http://www.state.gov/g/oes/rls/rpts/car/>.

Additional Resources:

1. *Earth Negotiations Bulletin* (2006, November 20). Vol. 12, No. 318.
2. G8 Summit 2007. (2007, June 7). "Growth and Responsibility in the World Economy: Summit Declaration."

Class 5 – Sept 18 **Insurance, Compensation** [Farber]

Guest: Evan Mills (Environmental Energy Technology Division,
Lawrence Berkeley National Laboratory)

Reading: 1. Gerrard, M. B., Ed. (2007), chapter 15.

2. Farber, Daniel A. (April 13, 2007). "Adapting to Climate Change: Who Should Pay?" UC Berkeley Public Law Research Paper No. 980361 Available at SSRN: <http://ssrn.com/abstract=980361>.

3. Ross, C., E. Mills, and S. Hecht. (2007). "Limiting Liability in the Greenhouse: Insurance Risk-Management in the Context of Global Climate Change." *Stanford Environmental Law Journal* and the *Stanford Journal of International Law*, Symposium on Climate Change Risk, Vol. 26A/43A:251-334.
<http://eetd.lbl.gov/EMills/PUBS/PDF/Liability-in-the-Greenhouse.pdf>.

Supplemental Reading (optional):

1. Mills, E. and E. Lecomte. (2006). "From Risk to Opportunity: How Insurers Can Proactively and Profitably Manage Climate Change." (Ceres, Boston, MA).

http://eetd.lbl.gov/EMills/PUBS/PDF/Ceres_Insurance_Climate_Report_090106.pdf

2. Mills, E. (2006). "Synergisms between Climate Change Mitigation and Adaptation: An Insurance Perspective." *Mitigation and Adaptation Strategies for Global Change*, Special Issue on Challenges in Integration Mitigation and Adaptation Responses to Climate Change, Vol. 12, No. 5, pp. 809-842.

http://eetd.lbl.gov/EMills/PUBS/Insurance_AandM.html

3. Mills, E., R.J. Roth Jr., and E. Lecomte. (2006). "Availability and Affordability of Insurance Under Climate Change: A Growing Challenge for the U.S." *Journal of Insurance Regulation*, Winter 2006, Vol. 25, Issue No. 2, pp. 109-149.

<http://eetd.lbl.gov/EMills/PUBS/PDF/JIR-ZB-25-02.pdf>.

4. Mills, E. (2005). "Insurance in a Climate of Change." *Science* Vol. 308, Issue 5737, pp.1040-1044. / 12 August. http://eetd.lbl.gov/EMills/PUBS/Insurance_Science.html

Additional Resources:

1. Mills, E. (October 2007). "From Risk to Opportunity: 2007, Insurer Responses to Change." (Ceres, Boston, MA).

<http://insurance.lbl.gov/opportunities/Risk-to-Opportunity-2007.pdf>

Class 6 - Sept 25 **Litigation & the Role of Federalism: *Massachusetts v. EPA*** [Frank]

Reading: 1. Gerrard, *Global Climate Change & U.S. Law*, pp. 183-193

2. *Massachusetts v. USEPA*, 127 S.Ct. 1438 (2007) [be sure to read all majority and dissenting opinions].

Supplemental Reading (optional):

1. Read op-ed piece, "Greening Bench," from the August 20, 2007 issue of the *San Francisco Daily Journal*.

2. View webcast of CCELP-sponsored program, "The U.S. Supreme Court

Confronts Global Warming: Deconstructing *Massachusetts v. USEPA*.”
http://webcast.berkeley.edu/event_details.php?webcastid=19234

Class 7 - Oct 9

California's AB 32, SB 1368 and AB 1493 (“Pavley Bill”): Case Studies in Turning State & Regional Climate Change Policy into Effective Regulation [Frank]

Guests: Randy Wu (California Public Utilities Commission),
Aron Livingston (Air Resources Board)

- Reading: 1. Gerrard, Global Climate Change and U.S. Law, pp.315-370
2. California's AB 1493 (“Pavley legislation”)-California Statutes 2002, ch. 200
3. California's AB 32 (California Global Warming Solutions Act of 2006)—California Statutes 2006, chapter 488
4. California's SB 1368--California Statutes 2006, chapter 598
5. Chemerinsky, et al., “California, Climate Change and the Constitution,” 37 ELR 10653 (2007).

Supplemental Reading (optional):

Review the following websites, focusing on climate change initiatives undertaken by the respective California state regulatory agencies:

1. California Public Utilities Commission website: <http://www.cpuc.ca.gov/>
2. California Energy Commission website: <http://www.energy.ca.gov/>
3. Main CA climate change website: www.climatechange.ca.gov/
4. Air Resources Board website--climate change page:
<http://www.arb.ca.gov/cc/cc.htm>

Class 8 - Oct 16

Putting a Price on Carbon – Cap and Trade, Carbon Tax [Payne]

Guest: Michael Hanemann (Chancellor’s Professor of Public Policy, U.C. Berkeley)

- Reading: 1. Wara, M. (2007). "Is the global carbon market working?" *Nature* 445: 595.
2. Gerrard, pp. 583-84.
3. View/listen to your choice of at least one of the presentations from the conference “Cap and Trade as a Tool for Climate Change Policy”, in the sessions on *Frameworks for Market Mechanisms, Risk and Flexibility, Dispute Settlement & Compliance, Dianne Feinstein Keynote, or Looking Past 2012* (and be inspired by the student posters also on the conference website)

<http://www.law.berkeley.edu/centers/envirolaw/capandtrade/agenda.html>

Supplemental Reading (optional):

1. Ruth Greenspan, What to Do About Climate Change, *Foreign Affairs*, Vol., No. 3. 85.
2. Freestone, D. (2005). *The UN Framework Convention on Climate Change, the Kyoto Protocol, and the Kyoto Mechanism. Legal Aspects of Implementing the Kyoto Protocol Mechanisms*. Freestone and Streck, Oxford University Press. (on reserve at Boalt Law Library)
3. Market Advisory Committee, FINAL REPORT: Recommendations for Designing a Greenhouse Gas Cap-and-Trade System for California, recommendations of the Market Advisory Committee to the Air Resource Board, posted: June 29, 2007.
http://www.climatechange.ca.gov/policies/market_advisory.html

4. National Petroleum Council (2007). Facing the Hard Truths about Energy: A Comprehensive View to 2030 of Global Oil and Natural Gas (Draft Report; final expected Sept 2007), National Petroleum Council.
5. Peeters, M. and K. Deketelaere (2006). EU climate change policy : the challenge of new regulatory initiatives, Edward Elgar.
6. PricewaterhouseCoopers (2007). Building Trust in Emissions Reporting, PricewaterhouseCoopers.
<http://www.pwc.com/extweb/pwcpublishations.nsf/docid/8DF4237F6B2F7FCF8525728300503B70>
7. Swift, Byron. (2005). "U.S. Emissions Trading: Myths, Realities, and Opportunities," 20 Nat. Resources & Env't 3.
8. Victor, D. G. and D. Cullenward. (2007). Making Carbon Markets Work. Scientific American.

Additional Resources:

1. Parry, I. & Pizer, W. (September 2007). "Emissions Trading versus Emissions Trading versus CO₂ Taxes versus Standards".

Class 9 - Oct 23

Climate Change-Related Litigation: Surveying the Initiatives in State & Federal Courts [Frank]

Guest: Ken Alex (Supervising Deputy Attorney General, Environment Section, California Attorney General's Office)

- Reading:
1. *People of the State of California v. General Motors Corp.*, __ F.Supp.2d __, 2007 U.S. Dist. LEXIS 68547 (N.D. Cal. Spetember 17, 2007)
 2. *Connecticut v. American Electric Power Co.*, 406 F. Supp. 2nd 265 (S.D.N.Y. 2005), *appeal pending*.
 3. *Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie*, __ F.Supp.2d __, 2007 U.S. Dist. LEXIS 67617 (D.Vt. September 9, 2007) [skim this 240-page opinion; read the introduction and conclusion]
 4. California Attorney General's October 2007 Petition to USEPA
 5. California Attorney General's September 2007 Litigation Settlement with San Bernardino County
 6. Summary of current climate change litigation
http://www.dailyreportonline.com/Editorial/News/new_singleEdit.asp?individual_SQL=9%2F19%2F2007%4016692_Public_.htm

Additional Resources:

1. Petition to SEC re: Climate Risk Disclosure.
<http://www.sec.gov/rules/petitions/2007/petn4-547.pdf>

Class 10 – Oct 30

Human Rights, Social justice, Environmental Justice [Payne]

Guests: Martin Wagner (EarthJustice, International Program), Richard Drury (Adams Broadwell Joseph & Cardozo)

- Reading:
1. Kolbert, Field Notes from a Catastrophe, note especially chapters 1, 5, 6.
 2. Dorsey, Michael K., "Carbon Trading Won't Work", LA Times (April 1, 2007).
<http://www.latimes.com/news/opinion/commentary/la-op-dorsey1apr01.0,1230661.story?coll=la-home-commentary>.
 3. Drury, Richard, Global Warming Pollution Trading: Three Hot Issues.

4. Summary of Petition to the Inter American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States. (2005).

and at least one of the following:

1. Jamieson, D. (2001). Climate change and global environmental justice. In *Changing the Atmosphere: Expert Knowledge and Environmental Governance*. C. Miller and P. N. Edward. MIT Press: 287-308. (on reserve at Law Library)

2. Cal EJAC - Committee Recommendations on Proposed Early Actions to Mitigate Climate Change in California

http://www.arb.ca.gov/cc/ejac/ghg_eams_finalcommitteerec.pdf

3. Drury, et al. (1999). "Pollution Trading and Environmental Injustice: Los Angeles' Failed Experiment in Air Quality Policy," 9 *Duke Env'tl Law & Policy Forum* 231.

Supplemental Reading (optional):

1. Posner, E. A. and C. R. Sunstein (August 2007). "Climate Change Justice." University of Chicago Law & Economics, Olin Working Paper No. 354 Available at SSRN: <http://ssrn.com/abstract=1008958>.

2. CalEPA, Intra-Agency Environmental Justice Strategy. (2004).

<http://www.calepa.ca.gov/envjustice/Strategy/>

3. Energy Diet for a Starving World? (2007). (National Center for Policy Analysis)

http://www.ncpa.org/sub/dpd/index.php?page=article&Article_ID=14022

Class 11 – Nov 6 **Technological Innovation & Implementing Alternative Energy** [Payne]

Guests: Margaret Taylor (Assistant Professor, Goldman School of Public Policy), Steve Weissman (California Public Utilities Commission)

Reading: 1. Federal Financial Interventions and Subsidies in Energy Markets (1999) – Executive Summary, pp. vii-x.

2. Status of Renewable Energy in the West -- all 4 pages.

3. Rabe, B. (2006). "Race to the Top: The Expanding Role of U.S. State Renewable Portfolio Standards" pp. v-vi and 1-9.

4. Freeing the Grid (2007) - Summary pp. 1-13 (numbers refer to document pages, not PDF pages).

http://www.newenergychoices.org/uploads/FreeingTheGrid2007_ExSum.pdf

Supplementary Reading (optional):

1. S. Pacala, et al. (2004). "Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies". *Science* 305, 968.

Class 12 – Nov 13 **US Energy Regulation & Policy: What's in Play?** [Frank]

Guest: Alex Farrell (Assistant Professor, Energy and Resources Group, U.C. Berkeley)

Reading: 1. Table, "Climate Change Bills of the 110th Congress".

2. "Comparison of Legislative Climate Change Targets in the 110th Congress".

3. Skim S. 2121, "Lieberman-Warner" American Climate Security Act of 2007.

4. Read the executive summaries from the following two reports:

<http://repositories.cdlib.org/its/tsrc/UCB-ITS-TSRC-RR-2007-2/>

<http://repositories.cdlib.org/its/tsrc/UCB-ITS-TSRC-RR-2007-3/>

(Optional: read Introduction and Background of the second report (2007-03, pp. 9-26).)

Class 13 – Nov 20 **What About China?** [Payne]

Guests: Rob Collier (Fellow, Goldman School of Public Policy), Stanley Lubman (U.C. Berkeley School of Law)

- Reading: 1. Lubman, Stanley. (Spring 2000). “Bird in a Cage: Chinese Law Reform After Twenty Years”. *Northwestern Journal of International Law & Business*.
2. Collier, Rob. (2007, August 1). “Warming of glaciers threatens millions in China”. *San Francisco Chronicle*, p. A-8.
3. Economy, Elizabeth. (2007). “Great Leap Backward”. *Foreign Affairs* Vol. 86, No. 5.
<http://www.foreignaffairs.org/20070901faessay86503/elizabeth-c-economy/the-great-leap-backward.html>
4. Collier, Rob. (2007, August 18). “China's new middle class in love with cars – big cars”. *San Francisco Chronicle*, p. A-1.
5. Spencer, Jane. (2007, November 12). “Why China Could Blame Its CO2 on West”. *The Wall Street Journal*, p. A2.

Supplementary Reading (optional):

1. China National Report to UNFCCC, 2007.
2. Lubman, Stanley. (Fall 2006). “Looking for Law in China”. *Columbia Journal of Asian Law*.

Additional Resources:

1. Kahn, J. (2007, October 14). “In China, a Lake Champion Imperils Himself”. *New York Times*.

Class 14 – Nov 27 **The Next Big Thing** [Farber, Payne, Frank]

- Reading: 1. International Panel on Climate Change "Summary for Policymakers of the Synthesis Report of the IPCC Fourth Assessment Report," published in draft form on November 16, 2007.

http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf