Syllabus
Global Warming and Renewable Energy
Spring 2010 / Golden Gate University School of Law
Professor Alan Ramo

Introduction

The field of global warming and climate change is growing at an exponential rate. No one course, let alone a law course, can capture its many dimensions. Science, law, politics all are contributing to this field. Even within the law, there are numerous topics including international law, statutory law, the law of private actions and administrative law.

This course will sample various topics relating to global warming, including the state of the science and the role of international law. The reading will provide a taste of what causes climate change, the impacts of climate change and how government in the United States is beginning to addresses these issues.

The course will then focus on how the United States and particularly California is seeking to increase the role of renewable energy to displace fossil fuels and eliminate greenhouse gas emissions. How energy is produced, either to power our automobiles or the lights in our classroom, is key to our generation of greenhouse gasses. Displacing fossil fuels as energy sources is the key strategy for reducing greenhouse gases. California is the leading state in the country in seeking to address climate change and its policies provide a useful laboratory for analyzing potential strategies.

This is not a course on how to build a solar power plant, how to design wind technology or how to process biofuels. We will approach these topics as lawyers. Policies to support renewables range from restricting the import of coal based electrical generation, cap and trade market mechanisms to encourage innovation away from fossil fuels and incentives for energy efficiencies. What are these policies, how they work and to what extent the law is helpful or sufficient will be our focus.

Again, all we can do in this course is sample some of the issues regarding renewable energy. Each week's topics could easily be a whole semester's course. I look forward to contributions that will also be made by each student, both in seminar participation and in the papers that are required for the course as described below.

Required Text

We will be using a text and a supplemental reader. The reader will be available at the faculty center. The text is available at the GGU bookstore. The text is: *Climate Change and the Law,* Wold, Hunter and Powers 2009

Learning Outcomes:

This class has the following objectives:

1. Develop student familiarity with international, federal and state policies addressing global warming in general and renewable energy in particular. This objective will be achieved through our readings, class discussion and each student's writing and presentation of a research paper. Develop student proficiency in statutory interpretation of federal and California procedural laws;

2. Develop student proficiency in case opinion analysis including identify key components of a decision and the development of rules from multiple opinions;

3. Develop student proficiency in legal/factual analysis including identifying key facts, issue spotting and legal reasoning when reviewing case opinions;

4. Develop student proficiency in writing skills and written legal analysis, particularly in developing a research paper addressing policy issues;

5. Developing student oral advocacy skills through oral participation in the classroom;

6. Developing student ability to interpret and apply treaties and statutes.

Class Schedule and Readings

1. The Problem Greenhouse Gasses and Other Pollutants

Readings:

Text: pp. 1-15

(on TWEN site in "Course Materials") **The New Yorker** http://www.lexis.com/research/retrieve?_m=d237497dbd84392e8c68f92e6a69eb2f&docnum=3&_fmtstr=FULL&_startdoc=1&wchp=dGLzVtb-zSkAz&_md5=0c1f46e89b8318592314ee22cda25657, May 2, 2005, FACT; Annals Of Science; Pg. 64, THE CLIMATE OF MAN-II; The curse of Akkad., ELIZABETH KOLBERT

Understanding and Responding to Climate Change, Highlights of National Academies Reports http://dels.nas.edu/dels/rpt_briefs/climate_change_2008_final.pdf

2. Scientific Consensus on Problem, No Consensus on Solution

Readings:

Text: pp. 69-81

The Scientific Consensus on Climate Change, Naomi Oreskes, Science, p. 1686, December 2004 http://www.sciencemag.org/cgi/content/full/306/5702/1686

Intergovernmental Panel on Climate Change, Fourth Assessment Report Climate Change 2007: Synthesis Report, Summary for Policymakers (pp. 1-14)

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

World Meteorological Organization Press Release No. 869 (re 2009 temperatures)

http://www.wmo.int/pages/mediacentre/press_releases/pr_869_en.html

3. Implications Part I: US and the World

Readings:

Text: 16-47

4. Implications Part II: US and Environmental Justice

Readings:

Text: 466-477

Global Climate Change Impacts in the United States, US Global Change Research Program pp. 9-12, 129-134 (on TWEN site in "Course Materials")

The Climate Gap Report pp. 5-18 (on TWEN site in "Course Materials")

5. International Global Approach I United Nations Framework Convention on Climate Change

Readings:

Text: 145-150, 169-182, 184-187, skim 927-934

6. International Global Approach II. Kyoto

Readings:

Text: 205-239

7. International Global Approach III. Kyoto Implementation

Readings:

Text: 239-270

Copenhagen accord on TWEN in course materials.

8. US Policy, Energy Regulatory Approach: Background

Readings:

Text: 652-672

FERC v. Mississippi (US 1982) (on TWEN site in "Course Materials" for edited version)

New Charleston Power v. FERC (1995) (also on TWEN site)

9. US Policy, Energy regulatory Approach Recent Legislation

Readings:

CRS Report to Congress – Energy Policy Act of 2005 – Summary and Analysis of Enacted Provisions (2006) (Read summary and pp. 1-19)
http://www.ncseonline.org/NLE/CRSreports/06Apr/RL33302.pdf

CRS: Energy Independence and Security Act of 2007 (2007) pp.CRS-2, CRS-5&6, and CRS-12 through CRS-14 http://www.state.vt.us/psb/document/ElectricInitiatives/CRS%20Report.pdf

Energy Provisions in the American Recovery and Reinvestment Act of 2009 (P.L. 111-5) http://assets.opencrs.com/rpts/R40412_20090312.pdf (Read summary and pp. 4-13 [DOE]; 18-21)

10. US Legislative Proposals

Readings:

Text: 479-486

CRS: Greenhouse Gas Legislation: Summary and Analysis of H.R. 2454 as Passed by the House of Representatives http://assets.opencrs.com/rpts/R40643_20090727.pdf (Read summary and pp. 1-17,29-31, 126-129)

11. US Legislative Proposals and Administrative Proposals Continued

CRS: Greenhouse Gas Legislation: Summary and Analysis of H.R. 2454 as Passed by the House of Representatives http://assets.opencrs.com/rpts/R40643_20090727.pdf (77-110)

The Climate Gap Report (on TWEN under "Course Materials") pp. 18-25

The Climate Gap and the American Clean Energy Security Act (on TWEN under "Course Materials")

End of Magical Thinking [On TWEN under Course Materials]

12. Federal Case Law on Regulatory Authority

Readings:

Text: 506-518,543-551, 564-574

US EPA Fact Sheet—Proposed Rule: Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule http://www.epa.gov/NSR/fs20090930action.html

Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act, US EPA, just review page at http://www.epa.gov/climatechange/endangerment.html and Frequently Asked Question whose link is on that page or go directly to http://www.epa.gov/climatechange/endangerment/downloads/EndangermentFinding_FAQs.pdf

13. Federal Transportation Policy and Case Law

Readings:

Text: 553-562; 716-737

Executive Summary: EPA's Waiver Decision on California's Greenhouse Gas Emission Standards for New Motor Vehicles
http://www.epa.gov/oms/climate/ghgwaiverexecutivesummary.pdf

14. California Policy I

Readings:

AB 32 (on TWEN under "Course Materials"); Text 845-849

Skim Governor Schwarzenegger 2005 Executive Order on Climate Change S-3-05
http://gov.ca.gov/index.php?/executive-order/1861/

Climate Change Scoping Plan *a framework for change Prepared by* the California Air Resources Board for the State of California DECEMBER 2008
Pursuant to AB 32 The California Global Warming Solutions Act of 2006
http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf pp. 1-14

15. California Policy II The Plan

Readings:

Climate Change Scoping Plan *a framework for change Prepared by* the California Air Resources Board for the State of California DECEMBER 2008
Pursuant to AB 32 The California Global Warming Solutions Act of 2006
http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf pp. 15-45

16. California Policy III

Readings:

Climate Change Scoping Plan *a framework for change Prepared by* the California Air Resources Board for the State of California DECEMBER 2008
Pursuant to AB 32 The California Global Warming Solutions Act of 2006
http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf 45-72; 86-93

17. California Policy III – Renewable Energy Portfolio Standard

Text: 694- 702, 841-845

"The Rise of Renewable Energy, Scientific American", Daniel M. Kammen, p. 84, Sept 2006
http://rael.berkeley.edu/sites/default/files/old-site-files/2006/Kammen-SciAm-Renewables-9-06.pdf

CPUC Renewables Energy Portfolio Standard Quarterly Report

http://www.cpuc.ca.gov/NR/rdonlyres/52BFA25E-0D2E-48C0-950C-9C82BFEEF54C/0/FourthQuarter2009RPSLegislativeReportFINAL.pdf

Skim: SB 1078, SB 107

Gov. Schwarzenegger Executive Order http://gov.ca.gov/executive-order/13269/

18. Renewable Energy Credits

Readings:

Renewable Energy Credits in California After SB 107 (2007) Energy Policy Initiative Center http://www.sandiego.edu/epic/publications/documents/070625_RECs_SB107_FINAL_000.pdf, pp.1-13

Public Utilities code § 399.16 (appendix A of decision below)

CPUC FINAL DECISION AUTHORIZING USE OF RENEWABLE ENERGY CREDITS FOR COMPLIANCE WITH THE CALIFORNIA RENEWABLES PORTFOLIO STANDARD (Read pp. 2-6 (middle up to procedural background; 87-108)

http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/115056.htm

AB 64

http://www.aroundthecapitol.com/billtrack/text.html?bvid=20090AB6491ENR

Schwarzenegger veto of AB 64

http://gov.ca.gov/pdf/press/2009bills/AB64_Krekorian_Veto_Message.pdf

19. Solar I Distributed Solar

Readings:

Text: 687-691

Utility Solar Assessment Study (June 2008), Clean Edge Market Authority and Co-op America http://www.cleanedge.com/reports/pdf/USA_Study.pdf pp.4-12

California's Solar Rights Act – A Review of Statutes and Relevant Cases (2007) Energy Policy Initiative Center
http://www.sandiego.edu/epic/publications/documents/070123_RightsActPaperFINAL.pdf 1-21

20. Solar II Distributed Solar II

Government's Role in Creating a Vibrant Solar Power Market in California, Bernadette Del Chiaro and Rachel Gibson, Golden Gate University Law Review, Environmental Law Journal, *36 Golden Gate U.L. Rev. 347* Spring 2006

Read http://www.awea.org/faq/netbdef.html

AB 920 (net metering)
http://www.aroundthecapitol.com/billtrack/text.html?bvid=20090AB92096CHP

"Berkeley going solar – city pays up front, recoups over 20 years", Carolyn Jones, San Francisco Chronicle, October 26, 2007 http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/10/25/MNAIT0DQO.DTL (on TWEN under "Course Materials" and retrievable on LexisNexis)

21. Solar III Thermal, Commercial and Local Initiatives

Readings:

Pacific Gas & Electric Company Press Release for 553 MW Solar Thermal Plant in the Mojave Desert http://www.pge.com/about/news/mediarelations/newsreleases/q3_2007/070725a.shtml

"Potential Carbon Emissions Reductions from Concentrating Solar Power by 2030", Mark S. Mehos and David W. Kearney, Ph.D., in Tackling Climate Change in the US, American Solar Energy Society, 2007. pp. 79-89

http://www.ases.org/images/stories/file/ASES/climate_change.pdf

In Our Backyard, How to Increase Renewable Energy Production on Big Buildings and Other Local Spaces. Berkeley Law, UCLA Law December 2009
http://www.law.berkeley.edu/files/In_Our_Backyard_Dec_3_2009(1).pdf

22. Wind

Readings:

Text: 683-686

Ronald H. Roseberg, *Making Renewable Energy a Reality–Finding Ways to Site Wind Power Facilities*, 32 Wm. & Mary Entl. L & Pol'y Rev. (abridged) (on TWEN under "Course Materials")

Windpower: Generating Electricity and Lawsuits (2007) 28 Energy L.J. 489, by Brit T. Brown and Benjamin A. Escobar.

23. Biofuels and Alternative Automobiles

Readings:

Text: 753-782

Executive Order S-06-06, Governor Schwarzenegger, April 25, 2006
http://gov.ca.gov/executive-order/183/

24. Nuclear

Readings:

Text: 678-682

Joseph P. Tomain, *Nuclear Futures*, 15 Duke Envtl. L. & Pol'y F. 221 (2005)

Nuclear Energy Balancing Benefits and Risks Charles D. Ferguson
CSR NO. 28, APRIL 2007 COUNCIL ON FOREIGN RELATIONS pp. 16-30
Download at: http://www.cfr.org/publication/13104/nuclear_energy.html

CRS: Greenhouse Gas Legislation: Summary and Analysis of H.R. 2454 as Passed by the House of Representatives http://assets.opencrs.com/rpts/R40643_20090727.pdf (Read summary and pp. 41-44)

25. "Clean" Coal

Readings:

Watch "Powered by Coal" 60 minutes video at:
http://www.cbsnews.com/video/watch/?id=4969902n

Text: 673-678; 851-857

Federal Control of Carbon Dioxide Emissions: What are the options?, Arnold W. Reitze, Jr. [read only section IV A& B] 36 B.C. Envtl. Aff. L. Rev. 1 (2009) (retrievable on TWEN or LEXIS)

Don't Get Burned: The Risks of Investing in New Coal-Fired Generating Facilities, Synapse pp. 29-35

http://www.synapse-energy.com/Downloads/SynapseReport.2008-02.ICCR.Don%27t-Get-Burned-Risks-of-New-Coal.07-014.pdf

CRS: Greenhouse Gas Legislation: Summary and Analysis of H.R. 2454 as Passed by the House of Representatives http://assets.opencrs.com/rpts/R40643_20090727.pdf (Read summary and pp. 17-25)