Green Energy Policies in the United States
Political Science 4028-005
Fall 2015

Instructor:

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Office Hours: 3:00-5:00, Tuesday and Thursday

Course Objective:

This course introduces you to the development and complexity of "green energy" policy in the United States. "Green energy" is an umbrella concept that describes a host of energy sources and technologies that are considered to be environmentally friendly (or more typically, non-fossil fuel based) in nature. The green industry has grown dramatically in the last decade, and politicians in both parties have proclaimed that green energy-related policies are effective at creating jobs, fostering energy independence, and protecting the environment. Speaking in 2011 at a factory where workers manufacture hybrid technology, President Barack Obama said that "The clean energy jobs at this plant are the jobs of the future—jobs that play well right here in America."[1] Similarly, Colorado Senator Cory Gardner made support for renewable energy a centerpiece of his 2014 senatorial campaign and stated that "I've spoken time and time again on behalf of supporting renewable energy."[2]

The green energy industry has emerged as an alternative to the traditional fossil-fuel based energy sector and has sometimes faced opposition from those whose interests and economic livelihoods are tied to fossil-fuel or fossil-fuel based industries: Cory Gardner, discussing how to balance renewable energy development

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[1] Quoted in M.J. Lee, "Barack Obama: Clean energy will deliver the jobs of the 'jobs of the future,'" *Politico*. Published 7 May, 2011. Accessed 9 April, 2015. Website: http://www.politico.com/news/stories/0511/54492.html.

[2] Quoted in Alex Guillen, "Gardner distances self from GOP on renewable energy—Orman doesn't take Roberts' bait on KXL—Florida gubernatorial candidates throw shade on solar positions—Green ad connects Tillis, coal ash spi," *Politico*. Published 16 October 2014. Accessed 7 May, 2015. Website: http://www.politico.com/morningenergy/1014/morningenergy15703.html.

with a desire to safeguard the interests of those in the coal, petrochemical, and manufacturing sectors, opposed cap and trade (a prominent green energy policy) on the premise that he does not want to "destroy the economy."[3] Unlike the green energy industries of "pioneers" like Germany and the Netherlands, America's green energy industry has largely developed without a mandate from the national government and has emerged from a constellation of municipal and state-level laws and regulations. The variegated nature of America's green energy policymaking environment has created the possibility for political conflict, as pro and anti-green energy interests may look to the federal government to adjudicate differences across state green energy laws.

In this course, we will learn about the "nuts and bolts" of different green energy policies, about why the green energy and fossil fuel industries are considered to have oppositional interests, and about how political variables in the United States have favored the adoption of certain types of green energy policies and hindered the adoption of other kinds of green energy policies. At the end of the semester, students should have a working knowledge about how specific types of green energy policies operate and should be able to identify how various political factors have affected and will continue to affect the development of green energy policies and initiatives in the United States.

Evaluation:

Your grade is made up of 6 components: 4 quizzes, which each cover a specific thematic unit explored in the course; 1 final (12 page double-spaced) paper in which you take a position with regard to one of two questions (these will be distributed to you later), and participation. The breakdown of each of these components (along with their respective dates) is shown below.

- Unit 1 Quiz (15% of grade): 9/18
- Unit 2 Quiz (15% of grade): 10/9
- Unit 3 Quiz (15% of grade): 11/6
- Unit 4 Quiz (15% of grade): 12/11
- Final Paper (20% of grade): 12/17 at 7 pm (the end of the "final" time window for this course)
- Participation (20% of grade): ongoing

As far as participation is concerned, I expect you to come to class having read the material and expect that you will contribute to discussions about the material and themes of the course. I will take attendance: every student is allowed **three free absences**. After the three free absences, each additional unexcused absence results in a loss of **2 points** from the participation portion of your grade. The three free absences **do not include** documented and excused absences, such as religious

[3] Ibid.

holidays, a death in the family, medical emergency, etc. Please notify me about any potential excused absences and (if possible) provide documentation (such as a doctor's note).

Reading List (in Sequential Order):

I encourage you to purchase *The Prize* by Daniel Yergin and **especially** *Greenhouse Governance* by Barry Rabe (Editor). I have arranged for copies of each of these books to be sold at the CU Bookstore. Additionally, I have arranged for copies of each of these books to be available for checkout at Norlin (course reserve). All other readings are available on the course website on D2L.

Hughes, Lleweyn, and Phillip Y. Lipscy. 2013. "The Politics of Energy," *Annual Review of Political Science* 16: 449-469.

Cherp, Aleh, and Jessica Jewell. 2011. "The Three Perspectives on Energy Security: Intellectual History, Disciplinary History, and the Potential for Integration," *Current Opinion in Environmental Sustainability* 3 (4): 202-212.

Yergin, Daniel. 1990. *The Prize: The Epic Quest for Oil, Money, and Power*. New York: Simon and Schuster.

Cheon, Andrew, and Johannes Urpelainen. Forthcoming. "Escaping Oil's Stranglehold: When Do States Invest in Energy Security?" *Journal of Conflict Resolution*.

Congressional Budget Office (CBO). 2012. "Energy Security in the United States."

Somerville, R., H. Le Treut, U. Cubasch, Y. Ding, C. Mauritzen, A. Mokssit, T. Peterson, and M. Prather. 2007. "Historical Overview of Climate Change." In *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Soloman S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.)]. Cambridge, United Kingdom and New York, United States of America: Cambridge University Press.

Intergovernmental Panel on Climate Change. 2011. "Special Report on Renewable Energy Sources and Climate Change Mitigation."

Rosen, Mark E. 2010. "Energy Independence and Climate Change: The Economic and National Security Consequences of Failing to Act" *University of Richmond Law Review* 44: 977.

Borick, Christopher P. 2010. "American Public Opinion and Climate Change." In *Greenhouse Governance: Addressing Climate Change in America* [Barry Rabe (ed.)]. Washington, DC: Brookings Institution Press.

Harrison, Kathryn. 2013. "The Political Economy of British Columbia's Carbon Tax," *OECD Environment Working Papers*, No. 63, OECD Publishing.

Harrison, Kathryn. 2010. "The Comparative Politics of Carbon Taxation," *Annual Review of Law and Social Science* (6): 507-529.

Rabe, Barry. 2010. "The "Impossible Dream" of Carbon Taxes: Is the "Best Answer" a Political Non-Starter?" In *Greenhouse Governance: Addressing Climate Change in America* [Barry Rabe (ed.)]. Washington, DC: Brookings Institution Press.

Breslow, Marc, Sonia Hamel, Patrick Luckow, and Scott Nystrom. 2014. "Analysis of a Carbon Fee or Tax as a Mechanism to Reduce GHG Emissions in Massachusetts." Prepared for the Massachusetts Department of Energy Resources.

Koehn, Jonathan. 2007. "Boulder's Carbon Tax: History and Implementation." Prepared for GRA Research Conference.

Mathys, Nicole, and Jaime de Melo. 2011. "Political Economy Aspects of Climate Change Mitigation Efforts," Working Paper Series 11101.

Coniff, Richard. 2009. "The Political History of Cap and Trade," *Smithsonian* (August).

Stavins, Robert. 2008. "Addressing Climate Change with a Comprehensive U.S. Cap and Trade System," *Oxford Review of Economic Policy* 24 (2): 298-321.

Ramesur, Jonathan. 2015. "The Regional Greenhouse Gas Initiative: Lessons Learned and Issues for Congress," *Congressional Research Service*.

State of California. 2006. Assembly Bill 32.

Wolak, Frank. 2008. "Low-Carbon Fuel Standards: Do They Really Work?" *Stanford Institute for Economic Policy Research* Policy Brief.

McConnell, Virginia. 2013. "The New CAFE Standards: Are They Enough on Their Own?" *Resources for the Future Discussion Paper*.

Yeh, Sonia, Julie Witcover, and James Bushnell. 2015. "Status Review of California's Low Carbon Fuel Standard." Prepared for University of California Davis Institute for Transportation Studies.

Pont, Jennifer, Stefan Unnasch, Michael Lawrence, and Scott Williamson. 2014. "A

Low Carbon Fuel Standard in Washington State: Revised Analysis with Updated Assumptions." Prepared for the Washington Office of Financial Management.

Rabe, Barry. 2007. "Race to the Top: the Expanding Role of U.S. State Renewable Portfolio Standards," *Sustainable Development Law and Policy* 72: 10-16.

Lyon, Thomas P., and Haitao Yin. 2010. "Why Do States Adopt Renewable Portfolio Standards: An Empirical Investigation," *The Energy Journal* 31 (3): 131-156.

Bayer, Patrick, and Johannes Urpelainen. 2013. "It's All About Political Incentives: Explaining the Adoption of the Feed-in Tariff," Working Paper.

Katzer, James, Stephen Ansolabehere, Janos Beer, John Deutch, Denny Ellerman, Julio Friedmann, Howard Herzog, Henry Jacoby, Paul Joskow, Gregory McRae, Richard Lester, Ernest Moniz, and Edward Steinfeld. 2007. "The Future of Coal: Options for a Carbon-Constrained World." Prepared as an Interdisciplinary MIT Study.

Folger, Peter, and Molly Sherlock. "Clean Coal Loan Guarantees and Tax Incentives: Issues in Brief," *Congressional Research Service*.

Goodman, David (director) and Ohio Coal Development Office. 2014. "2014 Coal Agenda."

Campbell, Richard, Peter Folger, and Phillip Brown. 2013. "Prospects for Coal in Electric Power and Industry," *Congressional Research Service*.

McElroy, Michael. 2013. "Fracking's Future: Natural Gas, the Economy, and America's Energy Prospects," *Harvard Magazine*.

Rabe, Barry. 2010. "Introduction: the Challenges of U.S. Climate Governance." In *Greenhouse Governance: Addressing Climate Change in America* [Barry Rabe (ed.)]. Washington, D.C.: Brookings Institution Press.

Rabe, Barry. 2010. "Can Congress Govern the Climate?" In *Greenhouse Governance: Addressing Climate Change in America* [Barry Rabe (ed.)]. Washington, D.C.: Brookings Institution Press.

Rosenbaum, Walter. 2010. "Greenhouse Regulation: How Capable is the EPA?" In *Greenhouse Governance: Addressing Climate Change in America* [Barry Rabe (ed.)]. Washington, D.C.: Brookings Institution Press.

Derthick, Martha. 2010. "Compensatory Federalism," in *Greenhouse Governance: Addressing Climate Change in America* [Barry Rabe (ed.)]. Washington, D.C.: Brookings Institution Press.

Posner, Paul. 2010. "The Politics of Vertical Diffusion: The States and Climate Change," in *Greenhouse Governance: Addressing Climate Change in America* [Barry Rabe (ed.)]. Washington, D.C.: Brookings Institution Press.

VanDeveer, Stacy, and Henrik Selin. 2010. "Re-engaging International Climate Change Governance: Challenges and Opportunities for the United States," in *Greenhouse Governance: Addressing Climate Change in America* [Barry Rabe (ed.)]. Washington, D.C.: Brookings Institution Press.

Selin, Henrik, and Stacy VanDeveer. 2010. "Multilevel Governance and Transatlantic Climate Change Policies," in *Greenhouse Governance: Addressing Climate Change in America* [Barry Rabe (ed.)]. Washington, D.C.: Brookings Institution Press.

Schedule:

Date	In-Class	Assignment
UNIT 1: MOTIVATIONS FOR GREEN ENERGY		
8/24	Course Introduction Review Syllabus	1. Read "The Politics of Energy" by Hughes and Lipscy. 2. Read "The Three Perspectives on Energy Security" by Cherp and Jewell.
8/26	The Politics of Energy: Why Green Energy?	1. Begin reading Part IV of *The Prize* by Yergin.
8/28	The Modern World Is Built on Oil (Part I)	1. Finish Part IV of *The Prize* by Yergin.
8/31	The Modern World Is Built on Oil (Part II)	1. Read Part V of *The Prize* by Yergin.
9/2	Green Energy as a Response to Oil Insecurity	1. Read "Escaping Oil's Stranglehold" by Cheon and Urpelainen. 2. Read "Energy Security in the United States" by the Congressional Budget Office."
9/4	*No Class.*	*None.*
9/7	*No Class.*	*None.*
9/9	Global Warming and Climate Change	1. Read "Historical Overview of Climate Change Science" by IPCC. 2. Read "Renewable Energy Sources and Climate Change Mitigation" by IPCC (pp. 1-26).
9/11	Green Energy as a Response to Climate Change	1. Read "Energy Independence and Climate Change" by Rosen.
9/14	Green Energy as an	*None.*

	American Response to Climate Change	
9/16	Review	*None.*
9/18	**Unit 1 Quiz**	*None.*
UNIT 2: POLICIES THAT REGULATE CARBON PRODUCTION		
9/21	American Public Opinion on Climate Change	1. Read "American Public Opinion and Climate Change" in *Greenhouse Governance*.
9/23	A Typology of Green Energy Policies: Carbon Taxes	1. Skim "The Political Economy of British Columbia's Carbon Tax." 2. Read "The Comparative Politics of Carbon Taxation."
9/25	Carbon Taxes in the United States (Part 2)	1. Read "The Impossible Dream of Carbon Taxes" in *Greenhouse Governance*.
9/28	Carbon Taxes in the United States (Part 3, Prospects)	1. State Approach: Skim "Analysis of a Carbon Fee or Tax as a Mechanism to Reduce GHG Emissions in Massachusetts." 2. Local Approach: Read "Boulder's Carbon Tax: History and Implementation."
9/30	A Typology of Green Energy Policies: Cap and Trade	1. Read "Political Economy Aspects of Climate Change Mitigation Efforts."
10/2	Cap and Trade in the United States (Part 2)	1. Read "The Political History of Cap and Trade." 2. Read "Addressing Climate Change with a Comprehensive US Cap and Trade System."
10/5	Cap and Trade in the United States (Part 3, Prospects)	1. Read "The Regional Greenhouse Gas Initiative: Lessons Learned." 2. Skim "Assembly Bill 32" of California (2006).
10/7	Review	*None.*
10/9	**Unit 2 Quiz**	*None.*
UNIT 3: POLICIES THAT INDIRECTLY AFFECT CARBON PRODUCTION		
10/12	A Typology of Green Energy Policies: Automotive Low-Carbon Fuel Standards	1. Read "Low Carbon Fuel Standards: Do They Really Work?"
10/14	Low Carbon Fuel Standards in the United States (Part 2)	1. Read "The Long and Winding Road: Automotive Fuel Policy and American Politics" in *Greenhouse Governance*.
10/16	Low Carbon Fuel Standards in the United States (Part 3)	1. Federal Approach: Read "The New CAFE Standards: Are They Enough on Their Own?" 2. State Approach: Read "Status Review of

		California's Low Carbon Fuel Standard."
10/19	Low Carbon Fuel Standards in the United States (Part 4, Prospects)	1. Read Impact Analysis of "A Low Carbon Fuel Standard in Washington State."
10/21	A Typology of Green Energy Policies: Renewables Portfolio Standards	1. Read "Race to the Top: The Expanding Role of U.S. Renewable Portfolio Standards."
10/23	Renewable Portfolio Standards in the United States (Part 2)	1. Read "Why Do States Adopt Renewable Portfolio Standards?"
10/26	Renewable Portfolio Standards in the United States (Part 3, Prospects)	1. Read "It's All about Political Incentives."
10/28	A Typology of Green Policies: Clean Coal?	1. Skim "The Future of Coal."
10/30	Clean Coal Policies in the United States (Part 2)	1. Federal: Read "Clean Coal Loan Guarantees and Tax Issues."
11/2	Clean Coal Policies in the United States (Part 3)	1. State: Read "2014 Coal Agenda" by Ohio Coal Development Office.
11/4	Clean Coal Policies in the United States (Part 4, Prospects)	1. Read "Prospects for Coal in Electric Power and Industry." 2. Read "Fracking's Future."
11/6	Review	*None.*
11/9	**Unit 3 Quiz**	*None.*
UNIT 4: HOW GOVERNMENT INSTITUTIONS AFFECT GREEN ENERGY DEVELOPMENT		
11/11	How Does the U.S. "Govern" Climate?	1. Read "The Challenges of U.S. Climate Governance" in *Greenhouse Governance.*
11/13	Can Congress Legislate Climate Policy?	1. Read "Can Congress Govern the Climate?" in *Greenhouse Governance.*
11/16	The Executive Branch and Climate Policy	1. Read "Greenhouse Regulation: How Capable is the EPA?" in *Greenhouse Governance.*
11/18	Federalism and Climate Policy (Part 1)	1. Read "Compensatory Federalism" in *Greenhouse Governance.*
11/20	Federalism and Climate Policy (Part 2)	1. Read "The Politics of Vertical Diffusion: the States and Climate Change," in *Greenhouse Governance*.
11/30	Making National Climate Policy in a Global World (Part 1)	1. Read "Re-engaging International Climate Governance: Challenges and Opportunities for the United States," in *Greenhouse Governance.*
12/2	Making National Climate Policy in a Global World (Part 2)	1. Read "Multilevel Governance and Transatlantic Climate Change Policies," in *Greenhouse Governance.*

12/4	Debate on How to Reconcile National and International Climate Goals	*None.*
12/7	Writing Workshop	*None.*
12/9	Review	*None.*
12/11	**Quiz 4**	*None.*
12/17	**Final Paper Due at 7 pm**	