

Yale College – Environmental Studies Program

Spring 2019

Energy and environmental policy solutions for the Anthropocene

EVST 227b

Instructor: Robert J. Klee, Ph.D., J.D. (robert.klee@yale.edu)

Time/Location: Wednesday, 9:25-11:15 am, Loria Center B-50

Enrollment: Limited to 18 students

Credits: 1

Office Hours: Tuesday, 1-2 pm at 133 Kroon Hall (or by appointment)

Course overview

In this seminar, students will study innovative energy and environmental policy solutions for the problems of the Anthropocene – the new epoch of human dominance of the earth. Each week offers an in-depth look into a specific energy or environmental challenge and explores the innovative solutions that are helping to create more livable, more sustainable communities.

Students will explore policies for effective deployment of renewables, smart grids, corporate responsibility, emerging contaminants, zero emission vehicles, environmental information disclosure, carbon sequestration, climate adaptation, sustainable cities, and environmental education. Students will critically examine these policies through the lenses of equity and environmental justice, economic impacts (positive and negative), co-benefits, communication, legal governance systems, and politics.

This course is divided into three thematic units:

1. Combating global warming
2. Sustainable materials management
3. How to live and work sustainably

The syllabus below provides greater detail on each week's energy and environmental policy topics, and assigned readings for each week. Additional reading assignments may be added to reflect current developments in energy and environmental law and policy.

Readings are available on Google Drive at

<https://drive.google.com/open?id=1DsLHHyKdIF2GmpSQz802YAkfPJ4vmlJo>

Course requirements

Each student is responsible for four (4) position papers, 1,500 – 1,750 words each, due throughout the semester (as highlighted in the syllabus below). The position papers are each student's chance to perform original research and policy analysis, focused on the topics covered in prior seminar discussions. These position papers will generally contain the following:

- (1) Description of a significant energy or environmental issue/problem
- (2) Identification and description of a potential policy solution
- (3) Critical analysis of the policy solution based on environmental justice/equity, economics, co-benefits, legal governance structures, and/or political realities of the proposed solution
- (4) Ultimate assessment of the feasibility of the policy or program for wider adoption or application

Students are encouraged to meet with the instructor at least once prior to submission of each position paper to provide guidance and feedback.

Students are required to do assigned readings, attend class and actively participate in seminar discussions. Class participation will be 20% of the overall grade. Students are expected to come prepared with thought-provoking questions and comments. In the later weeks of the course, pairs or small groups of students will be assigned as facilitators of class discussion.

Grading

The student's grade will be based on the following:

Position papers: 80% (4 papers; 20% each)

Class participation: 20%

Academic Honesty Policy

Like freedom of speech, academic honesty holds a special place in a community devoted to the creation, preservation, and dissemination of knowledge. For this reason, it is important for students to learn how to acknowledge the contributions of others in their own work and to document properly their reliance on others' thinking.

Discovering how to use others' work to advance one's own is a key part of learning. Very few scholars ever have completely original ideas, and even the greatest scholars build on their predecessors' achievements. Understanding how to incorporate others' points into one's own arguments, and how to acknowledge those points properly, is one sign of maturing scholarship.

It is also important to understand that failure to know or follow the conventions of documentation and citation—even when inadvertent—is considered a grave breach of academic integrity. The concept of

academic dishonesty or cheating, detailed at greater length in the Undergraduate Regulations, includes any misrepresentation of others' work as one's own, such as unacknowledged paraphrasing or quoting, use of another student's material, incomplete acknowledgment of sources (including Internet sources), or submission of the same work to complete the requirements of more than one course.

The Yale Center for Teaching and Learning's Website offers more information about the conventions of using sources. Students who have doubts about when or how to cite should ask their course instructor, writing tutor, or residential college dean.

Computers and cell phones:

Class meetings need your full attention. Laptops are not permitted to be used in the classroom unless specifically indicated or you have a special approved reason that you must use one. Your cell phones should be stowed away in your bags and turned off.

Class Schedule / Syllabus

Week 1 (January 16)	<p>The Anthropocene: The epoch of human influence on the planet.</p> <p>Introduction and review of course requirements.</p> <p>Topics include: a survey of the current state of major environmental and energy challenges, highlighting the scope and scale of the problem humanity faces from our own actions. The effects of global warming, plastic pollution in the oceans, species decline and habitat loss, and emerging contaminants will be explored.</p> <p><u>Required reading:</u></p> <p>Intergovernmental Panel on Climate Change, Special Report on Global Warming of 1.5 °C – Summary for Policymakers (2018), <i>available at</i> https://www.ipcc.ch/site/assets/uploads/sites/2/2018/07/SR15_SPM_High_Res.pdf</p> <p>Parker et al., Planet or Plastic?: We made plastic. We depend on it. Now we're drowning in it. <i>National Geographic</i> 233(6) (Jun. 2018), <i>available at</i> https://www.nationalgeographic.com/magazine/2018/06/plastic-planet-waste-pollution-trash-crisis/</p> <p>Paul Egan, Michigan Civil Rights Panel: Flint Water Crisis Rooted in "Systemic Racism," DETROIT FREE PRESS (Feb. 18, 2017), http://www.chicagotribune.com/news/nationworld/midwest/ct-michigan-civil-rights-panel-flint-water-crisis-racism-20170218-story.html</p>
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	<p>Figueres, Three years to safeguard our climate, <i>Nature</i> 546(7660): 593-595 (28 June 2017)</p> <p>Waters et al., The Anthropocene is functionally and stratigraphically distinct from the Holocene, <i>Science</i> 351(6269) (8 Jan 2016).</p> <p>Rockström et al., A safe operating space for humanity, <i>Nature</i> 461: 472–475 (2009)</p> <p>Lerner, The Teflon Toxin (Part 6): Poisoning the Well, Toxic Firefighting Foam Has Contaminated U.S. Drinking Water, <i>The Intercept</i> (Dec. 16, 2015), available at https://theintercept.com/2015/12/16/toxic-firefighting-foam-has-contaminated-u-s-drinking-water-with-pfcs/</p> <p><u>Optional Reading:</u></p> <p>Klee and Graedel, Elemental Cycles: A Status Report on Human or Natural Dominance, <i>Annual Review of Environment and Resources</i>, 29:69-107 (2004).</p> <p>Crutzen, Geology of mankind, <i>Nature</i> 415(6867): 23 (Jan 3, 2002)</p> <p>Hernán Gómez and Kim Dietrich, The Children of Flint Were Not ‘Poisoned,’ N.Y. Times (July 22, 2018), https://www.nytimes.com/2018/07/22/opinion/flint-lead-poisoning-water.html</p>
UNIT #1:	Combating Global Warming
Week 2 (January 23)	<p>Deployment of clean energy</p> <p>Topics include: policies that promote deployment of clean energy (wind, solar, efficiency, storage) and zero carbon energy (large hydro, nuclear); the role of regulated vs. deregulated utilities; and the differences between grid scale and behind-the-meter renewables (like solar and storage)</p> <p><u>Required reading:</u></p> <p>Dernbach, Legal Pathways to Deep Decarbonization: Postscript, <i>Environmental Law Reporter: News & Analysis</i>, 48(10): 10875-10893 (Oct 2018).</p> <p>Sensiba et al., Deep Decarbonization and Hydropower, <i>Environmental Law Reporter: News & Analysis</i>, 48(4): 26-50 (Apr 2018).</p> <p>Repka and Smith, Deep Decarbonization and Nuclear Energy, <i>Environmental Law Reporter: News & Analysis</i>, 48(3): 10244-10265 (Mar 2018).</p>

	<p>Kennedy, The Role of Energy Efficiency in Deep Decarbonization, <i>Environmental Law Reporter: News & Analysis</i> 48(1): 32-61 (Jan 2018).</p> <p>Geels et al., Sociotechnical transitions for deep decarbonization, <i>Science</i> 357 (6357): 1242-1244 (22 Sep 2017).</p> <p>Shogren, As Trump Retreats, States Are Joining Forces on Climate Action, <i>Yale Environment</i> 360, 2017, at https://e360.yale.edu/features/as-trump-retreats-states-are-stepping-up-on-climate-action</p> <p><u>Optional Reading:</u></p> <p>Rogelj et al., Energy system transformations for limiting end-of-century warming to below 1.5 °C, <i>Nature Climate Change</i>, 5: 519–527 (2015).</p> <p>Suh et al. “Life Cycle Environmental and Natural Resource Implications of Energy Efficiency Technologies.” <i>Journal of Industrial Ecology</i> (2016). https://onlinelibrary.wiley.com/doi/full/10.1111/jiec.12435</p> <p>Gillingham et al., The rebound effect is overplayed, <i>Nature</i> 493(7433): 475-476 (Jan 24, 2013).</p> <p>Klee, Response to Vincent P. Pace’s Article, <i>Connecticut Journal of International Law</i>, 33(3): 361-368 (forthcoming 2019).</p>
<p>Week 3 (January 30)</p>	<p>Distributed clean energy through a smart grid and the internet of things</p> <p>Topics include: the changing utility model, distributed energy resources, demand response, smart meters, internet connected and controlled devices, real-time measurement and verification</p> <p><u>Required reading:</u></p> <p>Klass, Expanding the U.S. Electric Transmission and Distribution Grid to Meet Deep Decarbonization Goals, <i>Environmental Law Reporter: News & Analysis</i>, 47(9):10749-10766 (Sep 2017).</p> <p>Grubler et al., A low energy demand scenario for meeting the 1.5 °C target and sustainable development goals without negative emission technologies, <i>Nature Energy</i>, 3: 515–527 (2018).</p> <p>“What is the Smart Grid?” US Department of Energy, 2013. Link: https://www.youtube.com/watch?v=JwRTpWZReJk</p>

	<p>Michael Cembalest. "Pascal's Wager". J.P. Morgan Annual Energy Paper, 2018. Link: https://am.jpmorgan.com/blobcontent/1383540354532/83456/Pascals_Wager_2018_executivesummary.pdf</p> <p>Lazar, <i>Teaching the "Duck" to Fly, Second Edition</i>. Montpelier, VT: The Regulatory Assistance Project (2016), available at http://www.raponline.org/document/download/id/7956</p> <p><i>Optional reading:</i></p> <p>Welton, Electricity markets and the social project of decarbonization, <i>Columbia Law Review</i>, 118 (4): 1067-1138 (May 2018).</p>
<p>Week 4 (February 6)</p> <p>Paper # 1 DUE (based on topics covered in Weeks 2 & 3)</p>	<p>Clean transportation and the future of mobility</p> <p>Topics include: Deployment of zero emission vehicles (BEVs, PHEVs, and hydrogen fuel cell); investments in transit systems; tools for VMT reductions; ridesharing and ride-hailing services; autonomous vehicles</p> <p><i>Required reading:</i></p> <p>Various authors, Driving Ambition (Special Report), <i>Newsweek</i> (14 December 2018), available at https://www.pressreader.com/usa/newsweek/20181214</p> <p>Chris Nelder, James Newcomb, and Garrett Fitzgerald, "Electric Vehicles as Distributed Energy Resources." Rocky Mountain Institute, 2016. Link: https://www.rmi.org/wp-content/uploads/2017/04/RMI_Electric_Vehicles_as_DERs_Final_V2.pdf</p> <p>Jadun et al. "Electrification Futures Study." NREL, 2018 (Introduction and Transportation Chapter, pp. 1-34; rest is optional), available at https://www.nrel.gov/docs/fy18osti/70485.pdf</p> <p><i>Optional reading:</i></p> <p>Christopher Ingraham. "What the EPA's proposed fuel standards could do to your gas mileage." Washington Post, 2018, available at https://www.washingtonpost.com/business/2018/08/02/what-epas-proposed-fuel-standards-could-do-your-gas-mileage/?utm_term=.675ce56bfcf0</p> <p>Transportation Climate Initiative, Listening Sessions Summary Report, available at https://www.transportationandclimate.org/listening-session-summary-report</p>

<p>Week 5 (February 13)</p>	<p>Carbon sequestration and geoengineering</p> <p>Topics include: enhanced management of natural/working lands, prevention of deforestation, active carbon capture and storage, and geoengineering</p> <p><i>Required reading:</i></p> <p>Griscom et al., Natural climate solutions, <i>Proceedings of the National Academy of Sciences</i> 114(44): 11645–11650 (2017).</p> <p>Oswald Schmitz. “How ‘Natural Geoengineering’ Can Help Slow Global Warming.” <i>Yale Environment</i> 360, 2016. Link: http://e360.yale.edu/feature/how_natural_geo-engineering_can_help_slow_global_warming/2951/</p> <p>Jacobs and Craig, Legal Pathways to Widespread Carbon Capture and Sequestration, <i>Environmental Law Reporter: News & Analysis</i>, 47(12): 11022-11047 (Dec. 2017).</p> <p>Gerrard, Introduction and Overview, in <i>Climate Engineering and the Law: Regulation and Liability for Solar Radiation Management and Carbon Dioxide Removal</i> (Gerard and Hester, eds.) (2018), p. 1-27.</p> <p>Elizabeth Kolbert. “Can Carbon-Dioxide Removal Save the World?” <i>New Yorker</i>, 2017. Link: https://www.newyorker.com/magazine/2017/11/20/can-carbon-dioxide-removal-save-the-world</p> <p><i>Optional reading:</i></p> <p>Kelly Levin, James Mulligan, and Gretchen Ellison. “Taking Greenhouse Gases from the Sky: 7 Things to Know About Carbon Removal.” WRI, 2018. Link: http://www.wri.org/blog/2018/03/taking-greenhouse-gases-sky-7-things-know-about-carbon-removal</p> <p>Jon Gertner. “Is It O.K. to Tinker With the Environment to Fight Climate Change?” <i>The New York Times</i>, 2017. Link: https://www.nytimes.com/2017/04/18/magazine/is-it-ok-to-engineer-the-environment-to-fight-climate-change.html</p> <p>Ingrid Visseren-Hamakers et al. “Trade-offs, co-benefits and safeguards: current debates on the breadth of REDD+.” <i>Current Opinion in Environmental Sustainability</i> (2012). DOI: https://doi.org/10.1016/j.cosust.2012.10.005</p> <p>Scott Barrett. “The incredible economics of geoengineering.” <i>Environmental and Resource Economics</i> 39 (2008): 45-54. DOI 10.1007/s10640-007-9174-8</p>
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	<p>Streck. "Forests, Carbon Markets, and Avoided Deforestation: Legal Implications." <i>Carbon & Climate Law Review</i>, 2008. Link: http://www.lexxion.de/pdf/cclr/cclr_308_reading-sample.pdf. (Read pp 239-247).</p> <p>Margaret Skutsch. "The Evolution of International Policy on REDD+." <i>Climate Science</i> (2017). DOI: 10.1093/acrefore/9780190228620.013.43</p>
<p>Week 6 (February 20)</p>	<p>Adaptation and resilience: strengthening our communities</p> <p>Topics include: micro-grids, living shorelines, resilient building codes, and incorporating sea-level rise projections into zoning laws</p> <p><i>Required reading:</i></p> <p>NCA4 Vol II: Impacts, Risks, and Adaptation in the United States (summary findings)</p> <p>Environmental Justice Leadership Forum on Climate Change, Principles of Climate Justice (2009), http://www.ejnet.org/ej/ejlf.pdf.</p> <p>Suzanne Goldenberg, Climate Change: The Poor Will Suffer Most, THE GUARDIAN, March 30, 2014, available at https://www.theguardian.com/environment/2014/mar/31/climate-change-poor-suffer-most-un-report</p> <p>"Adapt, Curb, Engage: 21 Solutions to Protect Our Shared Planet." Cities4Climate, 2015. Link: https://envirocenter.yale.edu/sites/default/files/files/21%20Solutions%20to%20Protect%20Our%20Shared%20Planet.pdf</p> <p>Boyd, Holistic thinking beyond technology, <i>Nature Climate Change</i>, 7: 97–98 (2017)</p> <p><i>Optional reading:</i></p> <p>Trevor Houser, John Larsen, and Peter Marsters. "The Real Electricity Reliability Crisis." Rhodium Group, 2017. Link: https://rhg.com/research/the-real-electricity-reliability-crisis-doe-nopr/</p>

<p>Week 7 (February 27)</p> <p>Paper # 2 DUE (based on topics covered in Weeks 4 -6)</p>	<p>Putting a price on carbon</p> <p>Topics include: carbon taxes, carbon fees, cap & invest programs, and the social cost of carbon</p> <p><u>Required reading:</u></p> <p>Ian Parry and William Pizer. "Emissions Trading Versus CO2 Taxes Versus Standards" Resources for the Future, 2007. Link: http://www.rff.org/files/sharepoint/WorkImages/Download/CPF_7_IssueBrief_5.pdf</p> <p>Gillingham, et al., Lessons from first campus carbon-pricing scheme, <i>Nature</i> 551: 27 (2 November 2017).</p> <p>Schmalensee and Stavins, Lessons Learned from Three Decades of Experience with Cap and Trade, <i>Review of Environmental Economics and Policy</i>, 11(1): 59–79 (1 January 2017).</p> <p>Klinsky et al, Why equity is fundamental in climate change policy research, <i>Global Environmental Change</i>, 44: 170-173 (May 2017).</p> <p>Ricke et al., Country-level social cost of carbon, <i>Nature Climate Change</i>, 8: 895–900 (2018).</p> <p>James Temple, Surge of Carbon Pricing Proposals Coming in the New Year, <i>MIT Technology Review</i>, Dec. 4, 2017. Available at https://www.technologyreview.com/s/609560/surge-of-carbon-pricing-proposals-coming-in-the-new-year/</p> <p><u>Optional reading:</u></p> <p>Regional Greenhouse Gas Initiative, Proceeds Report 2016, available at https://www.rggi.org/sites/default/files/Uploads/Proceeds/RGGI_Proceeds_Report_2016.pdf</p>
<p>UNIT #2</p>	<p>Sustainable materials management</p>
<p>Week 8 (March 6)</p>	<p>The Circular Economy: How can we reduce our material footprint?</p> <p>Topics include: S.M.A.R.T. (pay-as-you-throw) waste policies, incentives for investment in organic waste infrastructure, the circular economy</p>

	<p><u>Required reading:</u></p> <p>Stahel, Circular economy, <i>Nature</i> 531 (7595): 435-438 (24 March 2016).</p> <p>Hood, Make recycled goods covetable, <i>Nature</i> 531 (7595): 438-440 (24 March 2016).</p> <p>Mathews and Tan, Circular Economy: Lessons from China, <i>Nature</i> 531 (7595): 440-443 (24 March 2016).</p> <p>Kiser et al., Circular economy: Getting the circulation going, <i>Nature</i> 531 (7595): 443-446 (24 March 2016).</p> <p>Korhonen et al., Circular Economy: The Concept and its Limitations, <i>Ecological Economics</i> 143: 37-46 (2018).</p>
<p>SPRING BREAK</p> <p>(March 11 – 22)</p>	<p>No class</p>
<p>Week 9 (March 27)</p>	<p>End of a product’s life: Whose responsibility is it, anyway?</p> <p>Topics include: industrial ecology principles of extended producer responsibility and design for environment for various potentially recyclable products like packaging, paint, mattresses, and e-waste</p> <p><u>Required reading:</u></p> <p>Brooks et al., The Chinese import ban and its impact on global plastic waste trade, <i>Science Advances</i> 4(6) (20 Jun 2018).</p> <p>Kunz et al., Stakeholder Views on Extended Producer Responsibility and the Circular Economy, <i>California Management Review</i> 60(3): 45-70 (2018).</p> <p>Atasu, Operational Perspectives on Extended Producer Responsibility, <i>Journal of Industrial Ecology</i>, 2018</p> <p>Gardner, Extended Producer Responsibility for Packaging and Printed Paper in the United States, <i>Journal of Industrial Ecology</i>, 17(2): 170-171 (2018).</p> <p>RecycleBC, <i>Packaging and Paper Product Extended Producer Responsibility Plan</i> (Oct. 2018), available at https://recyclebc.ca/wp-content/uploads/2018/10/Packaging-and-Paper-Product-Extended-Producer-Responsibility-Plan-October-2018.pdf</p>

<p>Week 10 (April 3)</p> <p>Paper # 3 DUE (based on topics covered in Weeks 7 -9)</p>	<p>Sunshine is the best disinfectant: eco-labeling and public information disclosure</p> <p>Topics include: the Toxics Release Inventory, emerging contaminants, eco-labels, corporate sustainability reporting</p> <p><u>Required reading:</u></p> <p>Klee, Enabling Environmental Sustainability in the United States: The Case for a Comprehensive Material Flow Inventory, <i>Stanford Environmental Law Journal</i>, 23(1): 131-192 (2004).</p> <p>Goldston, Not 'Til the Fat Lady Sings: TSCA's Next Act, <i>Issues in Science & Technology</i>, 33(1): 73-76 (Fall 2016).</p> <p>Clarke, Chemical Safety Act Is First New Environmental Law in 20 Years, <i>Environmental Forum</i>; 33(5): 9 (Sep/Oct 2016).</p> <p>Jennifer Steinhauer and Stephanie Strom, Senate To Vote on GMO Food Labeling Bill, N.Y. TIMES, March 15, 2016.</p>
<p>UNIT #3</p>	<p>How to live and work sustainably</p>
<p>Week 11 (April 10)</p>	<p>Where we live: Sustainable cities</p> <p>Topics include green infrastructure, complete streets, local food movements, brownfield redevelopment, bikeability/walkability, and autonomous vehicles.</p> <p><u>Required reading:</u></p> <p>John L. Renne, The Next Century of Sustainable Communities Will Be Organized Around Transportation, CITYLAB (Apr. 29, 2014), https://www.citylab.com/transportation/2014/04/next-century-sustainable-communities-will-be-organized-around-transportation/8980/</p> <p>Karen C. Seto et al., The New Geography of Contemporary Urbanization and the Environment, ANN. REV. ENVIRON. RES. 167-194 (2010).</p> <p>Dimitri Zenghelis & Nicholas Stern, Climate Change and Cities: A Prime Source of Problems, Yet Key to a Solution, GUARDIAN (Nov. 19, 2015), https://www.theguardian.com/cities/2015/nov/17/cities-climate-change-problems-solution</p> <p>Eric Klinenberg, Adaptation, THE NEW YORKER (Jan. 7, 2013), available at http://www.newyorker.com/magazine/2013/01/07/adaptation-2</p>

	<p>Deadline 2020 United States, C40 CITIES (2017), http://www.c40.org/researches/deadline-2020-us</p> <p>Protecting Our Capital: How Climate Adaptation in Cities Creates a Resilient Place for Business, CDP (2014), http://www.c40.org/researches/protecting-our-capital</p> <p>Esty and Boyd, To Move Paris Accord Forward, Bring Cities and Companies on Board, <i>Yale Environment 360</i>, 2018 at https://e360.yale.edu/features/to-move-paris-accord-forward-bring-cities-and-companies-on-board</p>
<p>Week 12 (April 17)</p>	<p>Leveraging private capital: The role of the corporate sector</p> <p>Topics include: the emergence of Green Banks, socially responsible investments and green bonds, and corporate sustainability goals</p> <p><u>Required reading:</u></p> <p>Schub, Green Banks: Growing Clean Energy Markets by Leveraging Private Investment with Public Financing, <i>Journal of Structured Finance</i> 21(3): 26-35 (2015).</p> <p>Leonard, Clean Is the New Green: Clean Energy Finance and Deployment Through Green Banks, <i>Yale Law & Policy Review</i>, 33(1): 197-229 (2014).</p> <p>Ray Anderson, The Business Logic of Sustainability, TED (Feb. 2009), http://www.ted.com/talks/ray_anderson_on_the_business_logic_of_sustainability</p> <p>Paul Polman, Business, Society, and the Future of Capitalism, MCKINSEY QUARTERLY (May 2014), http://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/business-society-and-the-future-of-capitalism</p> <p>Ionescu-Somers, What's stopping your sustainability schemes? You are. <i>International Institute for Management Development</i> (March 2012), available at https://www.imd.org/uupload/research/challenges/TC023-12_What-s-stopping-your-sustainability-schemes.pdf</p> <p>Ionescu-Somers and Szekely, Tackling climate change demands transformational change: Companies must make sure they pay their part in finding solutions, <i>International Institute for Management Development</i> (June 2014), available at https://www.imd.org/uupload/research/challenges/TC043-14-TACKLING-CLIMATE-CHANGE-DEMANDS-TRANSFORMATIONAL-CHANGE.pdf</p> <p>Clapp, Investing in a green future, <i>Nature Climate Change</i>, 8: 96–97 (2018).</p> <p>Karpf & Mandel, The changing value of the 'green' label on the US municipal bond market, <i>Nature Climate Change</i>, 8: 161–165 (2018)</p>

	<p>Ahluwalia, <i>The Business of Pricing Carbon: How Companies are Pricing Carbon to Mitigate Risks and Prepare for a Low-Carbon Future</i> (2017), C2ES Issue Brief, available at http://www.c2es.org/document/the-business-of-pricing-carbon-how-companies-are-pricing-carbon-to-mitigate-risks-and-prepare-for-a-low-carbon-future/</p>
<p>Week 13 (April 24)</p>	<p>Creating the next generation of environmental stewards</p> <p>Topics include: environmental education, prescriptions for nature, environmental movements, communication and social media, diverse constituencies</p> <p><u>Required reading:</u></p> <p>Feinberg and Willer, The Moral Roots of Environmental Attitudes, <i>Psychology Science</i>, 24(1):56-62 (2013).</p> <p>Eliza Griswold, How ‘Silent Spring’ Ignited the Environmental Movement, NEW YORK TIMES MAGAZINE (Sept. 21, 2012), http://www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html</p> <p>Leiserowitz et al., Climate Change in the American Mind: May 2017, YALE PROGRAM ON CLIMATE CHANGE COMMUNICATION (July 5, 2017), at http://climatecommunication.yale.edu/wp-content/uploads/2017/07/Climate-Change-American-Mind-May-2017.pdf</p> <p>Meckling, et al., Winning Coalitions for Climate Policy, <i>Science</i> 328(6253): 1170-1171 (2015).</p> <p>Hedlin and Sunstein, Does Active Choosing Promote Green Energy Use, <i>Ecology Law Quarterly</i>, 43(1): 107-141 (2015).</p> <p>Bodansky, Should We Care What the Pope Says About Climate Change? <i>American Journal of International Law Unbound</i>, 109: 127-131 (2015).</p>
<p>Week 14 (May 1)</p> <p>Paper # 4 DUE (based on topics covered in Weeks 10- 13)</p>	<p>Reading week (No class)</p>