



BIBLIOGRAPHY OF CLIMATE CHANGE AND CARBON FOOTPRINT RESOURCES

VERSION DATE: FEBRUARY 23, 2009

Good Company (Eugene, OR) – www.goodcompany.com
Joshua Skov – joshua.skov@goodcompany.com – (541) 341-4663, ext. 211

Good Company revises this bibliography on a regular basis. Please e-mail Joshua Skov if you would like to receive updated versions. The citations are organized by category, to the extent possible; readers should expect overlap.

The resources in this bibliography are organized under the following categories:

- Forestry, Biological Sequestration and Rural Climate Issues (including brief annotation)
- Offsets and Offset Quality (including brief annotation)
- Cap-and-Trade, Carbon Tax and Incidence
- Climate Science, Physical Risk and Adaptation
- Corporate Climate Strategy, CSR and Carbon Disclosure
- Energy, Economic Issues and Efficiency Opportunity
- Life-cycle GHGs and Carbon Footprints
- Mandatory GHG Reporting (WA, OR, CA, WCI)
- Tools, Emissions Factors, Protocols and Calculators
- Transportation, Land Use and Fuels
- Renewables and RECs
- Miscellaneous Resources of Note

Forestry, Biological Sequestration and Rural Climate Issues

1. Erin Myers (2007). "Policies to Reduce Emissions from Deforestation (REDD) in Tropical Forests." Available at <http://www.rff.org/RFF/Documents/RFF-DP-07-50.pdf>.
The paper begins with an overview of the role of forests in climate change, and is followed by an examination of design elements that will affect the integrity of a REDD policy, including issues of scope, monitoring, baselines, leakage, stakeholder interests, permanence and liability, and the potential impact of REDD credits on the carbon market. The paper closes with an overview of the issues facing developing countries that would host REDD activities.
2. Michael Roddy (2007). "The Real Score on CO₂ Emissions and Framing Materials." Available at <http://www.forestcouncil.org/pdf/CO2emissions-Roddy.pdf>.
This paper discusses the common misconception that substitution of steel for lumber in a house framing application would result in a major reduction in America's CO₂ emissions. The data show that harvesting wood for housing produces over seven times the greenhouse gas emissions of steel. Even better, switching to steel in all new residential construction would have 2.9 times the positive impact on the US CO₂ emissions budget by requiring every new car and light truck sold to be a hybrid or other technology that doubled gas mileage.
3. Society for Range Management (2002). "Rangelands and Global Change." An issue paper created by the Society for Range Management. Available at http://www.rangelands.org/pdf/Global_Issue_Paper.pdf.
The paper describes the changes in global climate impacting rangelands. Rangelands provide our society with many products and services that support our standard of living and quality of life. These products can be visualized as ecosystem services. In a 15-year period from 1982 to 1997, more than 12 million acres of privately held rangeland was shifted to other uses in the United States. During five years, 1992 to 1997, almost as much land was shifted into urban development (5.6 m ac) as was converted to cropland (6.9 m ac).

4. Resource Innovations (2008). "Wood Heat Solutions: A community guide to biomass thermal projects." University of Oregon. Available at http://ri.uoregon.edu/documents/biomass_lowres.pdf.
This guide provides an introduction to woody biomass as a viable alternative to fossil fuels for generating heat and offers case study examples and sources for further information on developing a biomass heat project. It is specifically geared towards communities in the Pacific Northwest where biomass projects support social and ecological as well as economic goals.
5. Rick Brown, Defenders of Wildlife (2008). "The Implications of Climate Change for Conservation, Restoration, and Management of National Forest Lands." University of Oregon. Available at http://www.defenders.org/resources/publications/programs_and_policy/biodiversity_partners/implications_of_climate_change_for_conservation_restoration_and_management_of_national_forest_lands.pdf.
This paper is based on a review of key scientific literature on climate change and forests, in particular those aspects that appear to have the most relevance for management and policy related to national forests in the United States. Because policy is at least partly values-based, science cannot determine policy; however, basing policy on science increases the odds that policy will provide the values we seek.
6. The Forest Foundation. "The Carbon Cycle: Forestry never looked so cool." Available at <http://www.calforestfoundation.org/pdf/carbon-poster.pdf>.
This poster illustrates the carbon cycle for forestry.
7. The Forest Foundation. "Forests and the Carbon Cycle." Available at <http://www.calforestfoundation.org/pdf/Forests-and-the-Carbon-Cycle.pdf>.
The attached lessons were developed into a unit of study that will provide students with a basic understanding of the Carbon Cycle, Carbon Sequestration, the Greenhouse Effect, Global Warming and more specifically the interaction of trees and forests in all of these topics.
8. Thomas Bonnicksen (2008). "Protecting Communities and Saving Forests: Solving the wildfire crisis through restoration forestry." The Forest Foundation. Available at http://www.calforestfoundation.org/pdf/Saving_Forest_Book.pdf.
This paper examines how restoration forestry can solve the wildfire crisis. Restoration forestry aims to bridge the environmental disconnect, reacquaint people with their forests and restore forests to their historic grandeur. Using history as a guide and modern science as its primary tool, restoration forestry acknowledges the many values people expect from forests, such as the need to keep forests biologically diverse and productive, and the importance of ensuring the safety of forest communities. It addresses the economic realities, ecological challenges and social demands of making forests great again.
9. B. E. Law, O. J. Sun, et al (2003). "Changes in carbon storage and fluxes in a chronosequence of ponderosa pine." *Global Change Biology*. Available at http://wwwdata.forestry.oregonstate.edu/terra/pubs2/Law_Chronosequence_2003.pdf.
Total ecosystem carbon storage and the fraction of ecosystem carbon in aboveground wood mass increased rapidly until 150-200 years, and did not decline in older stands. Forest inventory data on 950 ponderosa pine plots in Oregon show that the greatest proportion of plots exist in stands ~100 years old, indication that a majority of stands are approaching maximum carbon storage and net carbon uptake. About 85% of the total carbon storage in biomass on the survey plots exists in stands greater than 100 years, which has implications for managing forests for carbon sequestration.
10. B. E. Law, D. Turner, et al (2004). "Disturbance and climate effects on carbon stocks and fluxes across Western Oregon USA." *Global Change Biology*. Available at http://www.fs.fed.us/pnw/pubs/journals/pnw_2004_law001.pdf.
The study used a spatially nested hierarchy of field and remote-sensing observations and a process model, Biome-BGC, to produce a carbon budget for the forested region of Oregon, and to determine the relative influence of differences in climate and disturbance among the ecoregions on carbon stocks and fluxes. The simulations suggest that annual net uptake (net ecosystem production (NEP)) for the whole forested region (8.2 million hectares) was 13.8 Tg C. The regional total reflects the strong east-west gradient in potential productivity associated with the climatic gradient, and a disturbance regime that has been dominated in recent decades by commercial forestry.

11. Julie Beane, John Hagan, et al (2008). "Forest Carbon Offsets: A scorecard for evaluating project quality." Manomet Center for Conservation Sciences. Available at <http://www.manometmaine.org/documents/ForestCarbonScorecard.pdf>.
The Manomet Forest Offset Scorecard is intended for project developers, potential offset buyers, and anyone interested in evaluating the technical rigor of a forest offset project. Through a series of 'yes/no' questions, the scorecard examines eight general components of offset projects: (1) contract structure; (2) baselines; (3) additionality; (4) monitoring, measurement, reporting, and verification; (5) permanence; (6) leakage; (7) transparency; and (8) co-benefits/costs. The scorecard contains 43 questions derived from an analysis and synthesis of the work of many different organizations and individuals. The scorecard was designed to be comprehensive, thorough, and unbiased toward any particular greenhouse gas registry or protocol.
12. Grant M. Domke, Alan R. Ek, et al (2008). "Assessment of Carbon Flows Associated with Forest Management and Biomass Procurement for the Laskin Biomass Facility." Minnesota Power. Available at <http://www.forestry.umn.edu/publications/staffpapers/Staffpaper198.pdf>.
This carbon life cycle analysis of forest-derived biomass was developed as part of a larger assessment by Minnesota Power detailing fuel supply, fuel procurement plans, and project engineering for a new 26-megawatt biomass generation facility in Hoyt Lakes, Minnesota. Forest-derived biomass is a renewable fuel that can be procured locally from forest harvest residues, mill residues, material from early thinnings and land cleaning, short rotation woody crops, brush, and urban wood waste. Energy generation from renewable fuels like forest biomass may dramatically alter the carbon balance in comparison to the use of fossil fuels like coal or natural gas. This study identifies the source and rate of carbon accumulation by tracking key inputs and outputs from forests through the conversion, regrowth and management activities over a 100-year period—the net carbon impact.
13. Matthew Hurteau and Malcolm North (2009). "Fuel treatment effects on tree-based forest carbon storage and emissions under modeled wildfire scenarios." *Frontiers in Ecology and the Environment*. Available at <http://oak.ucc.nau.edu/mdh22/Publications/Hurteau%20and%20North%202008%20carbon.pdf>.
Forests are viewed as a potential sink for carbon (C) that might otherwise contribute to climate change. It is unclear, however, how to manage forests with frequent fire regimes to maximize C storage while reducing C emissions from prescribed burns or wildfire. We modeled the effects of eight different fuel treatments on tree-based C storage and release over a century, with and without wildfire. Model runs show that, after a century of growth without wildfire, the control stored the most C. However, when wildfire was included in the model, the control had the largest total C emission and largest reduction in live-tree-based C stocks.
14. Matthew Hurteau, George Koch, and Bruce Hungate (2008). "Carbon protection and fire risk reduction: Toward a full accounting of forest carbon offsets." *Frontiers in Ecology and the Environment*. Abstract available at <http://www.esajournals.org/doi/abs/10.1890/070187>.
Management of forests for carbon uptake is an important tool in the effort to slow the increase in atmospheric CO₂ and global warming. However, some current policies governing forest carbon credits actually promote avoidable CO₂ release and punish actions that would increase long-term carbon storage. In fire-prone forests, management that reduces the risk of catastrophic carbon release resulting from stand-replacing wild-fire is considered to be a CO₂ source, according to current accounting practices, even though such management may actually increase long-term carbon storage. Examining four of the largest wildfires in the US in 2002, we found that, for forest land that experienced catastrophic stand-replacing fire, prior thinning would have reduced CO₂ release from live tree biomass by as much as 98%. Altering carbon accounting practices for forests that have historically experienced frequent, low-severity fire could provide an incentive for forest managers to reduce the risk of catastrophic fire and associated large carbon release events.
15. S. Luysaert, I. A. Janssens, et al (2007). "Photosynthesis drives anomalies in net carbon-exchange of pine forests at different latitudes." *Global Change Biology*. Available at <http://terraweb.forestry.oregonstate.edu/pubs2/LuysaertPinesGCB07.pdf>.
The study clearly highlights the need to use weather patterns rather than single climatic variables to understand anomalous CO₂ fluxes. Temperature generally showed little direct effect on anomalies in NEE but became important when the mean daily air temperature exceeded 23 °C.

16. J. Irvic, B.E. Law and K.A. Hibbard (2007). "Postfire carbon pools and fluxes in semiarid ponderosa pine in Central Oregon." *Global Change Biology*. Available at http://wwwdata.forestry.oregonstate.edu/terra/pubs2/GCB_1368.PDF.
Forest fire dramatically affects the carbon storage and underlying mechanisms that control the carbon balance of recovering ecosystems. In western North America where fire extent has increased in recent years, we measured carbon pools and fluxes in moderately and severely burned forest stands 2 years after a fire to determine the controls on net ecosystem productivity (NEP) and make comparisons with unburned stands in the same region.
17. Johannes Ebeling (2006). "Tropical Deforestation and Carbon Markets." EcoSecurities. Available at http://www.ecosecurities.com/Assets/3175/Pubs_Tropical%20deforestation%20and%20climate%20change%20-%20Summary%20presentation.pdf.
This presentation discusses the correlation between deforestation and climate change. Land-use change in tropics accounts for 20% of global GHG emissions. 13 million ha of tropical forests are lost per year. It is the largest source of emissions in the developing world and the second largest source globally after fossil fuel use.
18. Johannes Ebeling (2006). "Tropical Deforestation and Climate Change: Towards an international mitigation strategy." University of Oxford. Available at http://www.ecosecurities.com/Assets/3437/publ_tropical%20deforestation%20and%20climate%20change.pdf.
This dissertation evaluates recent proposals to include tropical deforestation into international climate change mitigation strategies. Deforestation is responsible for up to 25% of global greenhouse gas emissions. The research aim here is to evaluate implications of a range of policy options for the environmental effectiveness of a prospective agreement, as well as for its political and economic attractiveness for different countries and stakeholders. A literature review, 48 key stakeholder interviews, analyses of submissions to the United Nations Framework Convention on Climate Change, modeling approaches and statistical analyses were carried out to answer these questions. On this basis the study identifies potential deal breakers and explores possible solutions to existing "real" and perceived obstacles.
19. John Farrell and David Morris (2008). "Rural Power: Community-Scaled Renewable Energy and Rural Economic Development." New Rules Project. Available at <http://www.newrules.org/de/ruralpower.pdf>.
This report examines the current impact of renewable energy on rural communities and identifies existing and potential policies that could dramatically expand the economic benefit this new sector can bring to these communities.
20. Dennis R. Becker and Christine Lee (2008). "State Woody Biomass Utilization Policies." Staff Paper Series No. 199, Department of Forest Resources. Available at <http://www.forestry.umn.edu/publications/staffpapers/Staffpaper199.pdf>.
Woody biomass utilization can make significant contributions to renewable energy production, wildfire risk reduction, and enhancement of forest health. It may also provide economic and community development opportunities. Consequently, a number of policy initiatives have been implemented in recent years at both the federal and state level to address particular challenges with using woody biomass. The purpose of this database is to provide a comprehensive, up-to-date guide to woody biomass legislation for each state in the country.
21. Climate Action Team, Forest Sector Workgroup (2008). "Forest Sector Workgroup on Climate Change Mitigation Final Report." Available at http://www.ecy.wa.gov/climatechange/2008FAdocs/11241008_forestreportversion2.pdf.
The multi-stakeholder Forest Sector Workgroup on Climate Change Mitigation was chartered in April 2008 by the Director of the Department of Ecology and the Commissioner of Public Lands to make recommendations in response to direction from the Washington Legislature in E2SHB 2815. All members agree this package of recommendations represents a significant step in encouraging Washington to lead in larger-scale efforts so as to appropriately recognize the forest sector's positive contributions to mitigate climate change. The members therefore agree to support these recommendations. The recommendations are expected to be forwarded to the Legislature for its deliberation and, if adopted, set the stage for more detailed design work later. Workgroup members are proud to have participated and look forward to future similar opportunities.

22. U.S. Forest Service (2008). Pacific Southwest Research Station: Center for Urban Forest Research. Available at <http://www.fs.fed.us/psw/programs/cufr/>.
STRATUM is a street tree management and analysis tool for urban forest managers that uses tree inventory data to quantify the dollar value of annual environmental and aesthetic benefits: energy conservation, air quality improvement, CO2 reduction, stormwater control, and property value increase. It's an easy-to-use, computer-based program that allows any community to conduct and analyze a street tree inventory.
23. Wes Jackson and Wendell Berry (2009). "A 50-Year Farm Bill." *The New York Times Online*, January 5, 2009. Available at <http://www.nytimes.com/2009/01/05/opinion/05berry.html>.
The article discusses the abuse and waste of soil due to agricultural use and the lack of soil-saving cover and roots of perennial plants.
24. Bruce Lippke, Jeffrey Cornick, and Larry Mason (2006). "Alternative Landscape Fuel Removal Scenarios: Impacts of Treatment Thinning Intensity and Implementation Schedules on Fire Hazard Reduction Effectiveness, Carbon Storage, and Economics." Rural Technology Initiative and Consortium for Research on Renewable Industrial Materials. Available at http://www.ruraltech.org/pubs/working/06/working_paper_06.pdf.
The Consortium for Research on Renewable Industrial Materials (CORRIM) released a Life Cycle Inventory and Assessment study on wood demonstrating that for the Pacific Northwest, while longer forest management rotations increase the carbon stored in the forest, the corresponding reduction in carbon stored in long-lived products and displacement of fossil intensive products like steel or concrete, results in an overall reduction in carbon sequestered as rotation ages are increased.
25. Mateusz Perkowski (2009). "Emissions Rules Confounds Dairy Industry." *Capital Press Online*, January 29, 2009. Available at www.capitalpress.info/main.asp?SectionID=67&SubSectionID=616&ArticleID=48356&TM=70348.59. (Also available at <http://www.environmentalleader.com/2009/02/02/emissions-rules-confuse-dairy-farmers/>.)
This article discusses the confusion caused in the livestock industry by a federal rule that exempts certain farms from reporting animal waste emissions.
26. Ministry of Agriculture and Forestry (2008). "A Guide to Forestry in the Emissions Trading Scheme." Available at <http://www.maf.govt.nz/sustainable-forestry/ets/guide/>.
This guide has been prepared to assist the forestry sector, other landowners and potential investors understand the operation of the Emissions Trading Scheme (ETS) for forestry. The document provides a guide only and does not purport to give advice regarding specific circumstances in relation to the ETS, New Zealand's climate change legislation in general, or the particular circumstances of individual land and forest owners.
27. Farm Gas Calculator – COMING SOON. Information to be available at <http://www.farminstitute.org.au/calculators/farm-gas-calculator>.
The Australian Farm Institute has developed an on-line farm gross margins and emissions calculator which can do all that. The FarmGAS calculator is free of charge and will provide farmers with a full picture of how changing farm practices will impact on gross margins and greenhouse gas emissions.
28. Kate Galbraith (2008). "Farmers Panic About a 'Cow Tax'." *New York Times Online*, December 1, 2008. Available at <http://greeninc.blogs.nytimes.com/2008/12/01/farmers-panic-about-a-cow-tax/>.
The article describes the reaction from farmers against the notion of a "cow tax" on methane, a potent greenhouse gas emitted by livestock.
29. A.J. Finkral and A.M. Evans (2008). "The effects of a thinning treatment on carbon stocks in a northern Arizona ponderosa pine forest." Abstract available at http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6T6X-4S0HBYC-4&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&_view=c&_acct=C000050221&_version=1&_urlVersion=0&_usrid=10&_md5=09a824a61c820ddd5ceba132ad778500.
This study examines the effect of a restoration thinning treatment on the carbon stock of a ponderosa pine forest. An unintended consequence of fire suppression has been the increased storage of carbon in ponderosa stands. Thinning treatments reduce standing carbon stocks while releasing carbon through the combustion of fuel in logging machinery, burning slash, and the decay of logging slash and wood products. These reductions and releases of stored carbon must be compared to the risk of catastrophic fire burning through the stand and releasing large quantities of carbon to the atmosphere to more fully understand the costs and benefits – in carbon terms – of forest restoration strategies.

30. Handel (2008). "The Role of Forest Carbon in Emerging Ecomarkets Will be Significant." *CO₂ Handel.de*, December 30, 2008. Available at http://www.co2-handel.de/article58_10631.html.
This article describes how forest carbon will play a significant role in emerging environmental markets designed to address climate change, despite the reluctance of some countries to accept forest carbon offsets, predicted environmental economics expert Ricardo Bayon at a seminar for forestry professionals representing all facets of the industry.
31. Jackson Kuhl (2009). "How Green Are Forest-Based Carbon Offsets." *Fox News Online*, January 30, 2009. Available at <http://www.foxnews.com/story/0,2933,485124,00.html>.
This article examines forest-based carbon offsets and discusses how much they truly reduce greenhouse gas emissions.
32. Chris Goodall (2009). "Green Jobs: Time to Look at the Benefits of Growing and Using More Wood." *Carbon Commentary*, January 7, 2009. Available at <http://www.carboncommentary.com/2009/01/07/308>.
The article discusses the UK's lack of policies to increase jobs and meet climate change targets. The authors think that massively increasing the availability and use of wood for fuel can generate large numbers of jobs both in forestry and in business such as horticulture that can productively use the cheap heat from small wood-burning power stations.
33. John Talberth (2009). "Economic Benefits of Forest Restoration In the Signal Peak Assessment Area, Gila National Forest." Center for Sustainable Economy. Available at <http://www.sustainable-economy.org/>.
This report proposes a framework for economic evaluation of forest restoration projects from the broad, net public benefits perspective required by Forest Service statutes, rules, and regulations and one that considers forest restoration as a form of public investment in natural capital. We use proposed forest restoration treatments in the Signal Peak Assessment Area of the Gila National Forest as a case study.
34. The Ecosystem Marketplace Network (2009). *Forest Carbon Portal: Newsletter*. Signup to receive the monthly newsletter at http://147.202.71.177/~foresttr/documents/newsletters/forest_carbon.php?newsletterID=60.
The Forest Carbon E-Newsletter contains succinct summaries of only the most relevant and vetted news related to forest carbon in the last few months.
35. Stephen Mitchell, Mark Harmon and Kari O'Connell (In press). "Forest fuel reduction alters fire severity and long-term carbon storage in three Pacific Northwest ecosystems." Oregon State University. Available revision form at http://ecoinformatics.oregonstate.edu/new/FuelRedux_FS_CStorage_Revision2.pdf.
This paper discusses two forest management objectives being debated in the context of federally managed landscapes in the US Pacific Northwest which involve a perceived trade-off between fire restoration and C sequestration. The former strategy would reduce fuel (and therefore C) that has accumulated through a century of fire suppression and exclusion that has led to extreme fire risk in some areas. The latter strategy would manage forests for enhanced sequestration as a method of reducing atmospheric CO₂ and associated threats from global climate change. We explored the trade-off between these two strategies by a forest ecosystem simulation model, STANDCARB, to examine the effects of fuel reduction on fire severity and the resulting long-term C dynamics among three Pacific Northwest ecosystems.
36. M. North, M. Hurteau, and J. Innes (In press). "Fire suppression and fuels treatment effects on mixed-conifer carbon stocks and emissions." *Ecological Applications*. Available for download at <http://projects.atlas.ca.gov/docman/view.php/151/749/Fuel%20Treatment%20effects%20on%20carbon%20North%20et%20al%20Eco%20Apps.pdf>.
Depending on management, forests can be an important sink or source of carbon that if released as CO₂ could contribute to global warming. Many western forests are being treated to reduce fuels, yet the effects of these treatments on forest carbon are not well understood. We compared the immediate effects of fuels treatments on carbon stocks and releases in replicated plots before and after treatment, and against a reconstruction of active-fire stand conditions for the same forest in 1865.

37. Western Forestry Leadership Coalition (2009). "A Framework for Forests and Climate Change: Western Region Policy Themes, Principles and Key Approaches." Position Statement. Available at http://www.wflccenter.org/news_pdf/321_pdf.pdf.
This Western Forestry Leadership Coalition (WFLC) position statement outlines central climate change policy themes for the forestry sector which are further described by a set of 10 principles and concludes with key approaches to develop forest climate change policies at the regional, state and more local levels across the west. This position statement provides a framework that builds upon the prior WFLC Policy Statement entitled "Climate Change and Western Forests," dated 12/14/07 (http://www.wflcweb.org/pressandpolicy/policy_statements_resolutions.php).
38. United States Department of Agriculture (2008). "DRAFT: National Report on Sustainable Forests – 2010." Read *Criterion 5*, "Maintenance of Forest Contribution of Global Carbon Cycles." Available at <http://www.fs.fed.us/research/sustain/2010SustainabilityReport/documents/draft2010sustainabilityreport.pdf>.
This report is prepared to fulfill the United States' commitments to the Montréal Process Working Group on Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests. *Criterion 5* discusses the maintenance of forest carbon cycles.

For additional forestry-related resources, see the protocols offered by these organizations:

- GHG Protocol Initiative: <http://www.ghgprotocol.org>
California Climate Action Registry: <http://www.climateregistry.org>
The Climate Registry: <http://www.theclimateregistry.org>

Offsets and Offset Quality

39. EcoSecurities, Climate Biz: The Business Resource for Climate Management (2008). "Carbon Offsetting trends survey 2008." Available at http://www.ecosecurities.com/Standalone/Carbon_Offsetting_Trends_Survey_2008/default.aspx.
EcoSecurities and ClimateBiz announce the findings of their recent carbon offsetting trends survey 2008. This primary quantitative research study provides industry insight and benchmarks regarding some of the strategies that are being utilized to help the transition to a low carbon economy.
40. Anja Kollmuss, Kelge Zink and Clifford Polycarp (2008). "Making Sense of the Voluntary Carbon Market: A Comparison of Carbon Offset Standards." Stockholm Environmental Institute and Tricorona. Available at http://www.sei-us.org/wwf_offset_standards_execsum.pdf.
This report discusses the role of the voluntary carbon offset market and provides an overview and guide to the most important currently available voluntary carbon offset standards using the Clean Development Mechanism (CDM) as a benchmark. The report compares the standards side-by-side and outlines the most pertinent aspects of each.
41. U.S Government Accountability Office: Report to Congressional Requesters (2008). "Carbon Offsets: The U.S. Voluntary Market is Growing, but Quality Assurance Poses Challenges for Market Participants." Available at <http://www.gao.gov/new.items/d081048.pdf>.
GAO was asked to examine (1) the scope of the U.S. voluntary carbon offset market, including the role of the federal government; (2) the extent to which mechanisms for ensuring the credibility of offsets are available and used and what, if any, related information is shared with consumers; and (3) trade-offs associated with increased oversight of the U.S. market and including offsets in climate change mitigation policies. This report is based on analysis of literature and data, interviews with stakeholders, and GAO's purchase of offsets.
42. ConsumerReports.org (2008). "Carbon Conundrum." Available at <http://www.consumerreports.org/cro/money/travel/carbon-output-2-08/overview/carbon-output-ov.htm>.
This website reports the difference between carbon calculators when trying to determine the greenest way to travel.
43. Environmental Leader (2008). "Clif Family Winery Adds \$0.25 Per Bottle To Offset CO2 Emissions." *Environmental Leader Daily Newsletter*, December 3, 2009. Available at <http://www.environmentalleader.com/2008/12/03/clif-family-winery-adds-025-per-bottle-to-offset-co2-emissions/>.
The article describes a winery's efforts to offset the emissions caused by packaging and transporting its wine.

44. Anja Kollmuss, Michael Lazarus, et al (2008). "A Review of Offset Programs: Trading Systems, Funds, Protocols, Standards and Retailers." Stockholm Environmental Institute. Available at http://www.sei.se/pubs/Offset_kollmuss_final.pdf.
The goal of this review is to provide an up-to-date analysis and synthesis of the most influential offset programs and activities, to reflect on lessons learned, and thus to inform participants and designers of current and future offset programs. Our intention is to periodically update this review to stay abreast of ongoing developments, and to develop a website portal to make this information more accessible.
45. American College and University Presidents Climate Commitment (2008). "Investing in Carbon offsets: Guidelines for ACUPCC Institutions." Available at http://www.presidentsclimatecommitment.org/documents/CarbonOffsetsGuidelines_v1.0.pdf.
The ACUPCC fosters a strategic approach to carbon management on campuses by providing for signatories a common framework, through which they each create their own unique climate action plans with the same end-goal in mind: greenhouse gas neutrality.
46. Patrick McCully (2008). "Kyoto's Great Carbon Offset Swindle." *Renewable Energy World*, June 9, 2008. Available at <http://www.renewableenergyworld.com/rea/news/reinsider/story?id=52713>.
This article discusses shortcomings of the Kyoto Protocol's Clean Development Mechanism, claiming that emissions are increasing rather than decreasing due to the Protocol.

Cap-and-Trade, Carbon Tax and Incidence

47. Sightline Institute's Climate Policy Project. Available at www.sightline.org/research/energy/res_pubs/climate-policy-project.
48. Corbett Grainger and Charles Kolstad (2008). "Who pays for a carbon tax?" Department of Economics, University of California, Santa Barbara. Available at http://econ.ucsb.edu/~grainger/GK_Carbon_10-2.pdf.
49. Denny Ellerman and Paul Joskow (2008). "The European Union's Emissions Trading Scheme in perspective." Prepared for the Pew Center. Available at <http://www.pewclimate.org/docUploads/EU-ETS-In-Perspective-Report.pdf>.
50. Point Carbon (2008). "Preemptive Strike: The Future of Regional Trading Programs in the US." Available at <http://www.pointcarbon.com/research/cmana/cmana/1.954173>.
51. CapandDividend.org. Advocacy for cap-and-dividend model of cap-and-trade legislation. Available at www.capanddividend.org/.
52. Comments by Associated Oregon Industries on the Western Climate Initiative. Available at <http://www.aoi.org/publicpolicy/agenda/Energy.cfm?fid=1132> (link in the page).
53. Ralph Nader and Toby Heaps (2008). "We Need a Global Carbon Tax: The cap-and-trade approach won't stop global warming." *Wall Street Journal Online*, December 3, 2008. Available at http://online.wsj.com/article_email/SB122826696217574539-IMyQjAxMDI4MjA4NDIwNjQ2Wj.html.
54. Shai Oster (2008). "China Expands Markets for Emissions Trading." *Wall Street Journal Online*, November 11, 2008. Available at <http://online.wsj.com/article/SB122636062518315545.html>.
55. Anna Fahey and Eric Hess (2008). "Talking Cap and Trade: Fairness and economic benefits." Sightline Institute. Available at http://www.sightline.org/research/sust_toolkit/communications-strategy/climatefairnessmemo.
56. World Resource Institute (2008). "The Bottom Line on Cap-and-Trade." Issue 6, June 2008. Available at http://pdf.wri.org/bottom_line_cap_and_trade.pdf.

Climate Science, Physical Risk and Adaptation

57. Intergovernmental Panel on Climate Change, (IPCC) (2007). "Findings of the IPCC Fourth Assessment Report: Climate Change 2007: Climate change impacts, adaptation and vulnerability." Available at IPCC AR4 Working Group 2 web site, <http://www.ipcc.ch/ipccreports/ar4-wg2.htm>. (The *Summary for Policymakers*, at this Working Group II web site, is an excellent general summary of current climate science and implications for human activities.)
- Other resources from the IPCC, housed at the web site of the Union of Concerned Scientists:
 Findings of the IPCC Fourth Assessment Report: Climate Change Science (Working Group I) http://www.ucsusa.org/global_warming/science/ipcc-highlights1.html.
 Findings of the IPCC Fourth Assessment Report: Climate Change Impacts (Working Group II) http://www.ucsusa.org/global_warming/science/ipcc-highlights2.html.
 Findings of the IPCC Fourth Assessment Report: Climate Change Mitigation (Working Group III) http://www.ucsusa.org/global_warming/science/ipcc-highlights3.html.
58. A. Snover, P. W. Mote, et al (2005). "Uncertain Future: Climate Change and its Effects on Puget Sound." University of Washington. Available at <http://www.psat.wa.gov/climatechange>.
59. Center for Science in the Earth System (The Climate Impacts Group) Joint Institution for the study of the Atmosphere and Ocean (2007). "Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments." Available at <http://www.icleiusa.org/action-center/planning/adaptation-guidebook>.
60. Climate Impacts Group (CIG). Research focuses on water resources, aquatic ecosystems, forests, and coasts. Available at <http://cses.washington.edu/cig/>.
61. Energy Information Administration (2008). "Emissions of Greenhouse Gases in the United States 2007." Available at <http://tonto.eia.doe.gov/FTPROOT/environment/057307.pdf>.
62. Independent Scientific Advisory Board (ISAB) Climate Change Report (2007). "Climate Change Impacts on Columbia River Basin Fish and Wildlife." Available at <http://www.nwcouncil.org/library/isab/ISAB%202007-2%20Climate%20Change.pdf>.
63. ISAB (2007). "Climate Change Impacts on Columbia River Basin Fish and Wildlife." Independent Scientific Advisory Board. Available at <http://www.nwcouncil.org/library/isab/isab2007-2.htm>.
64. Reid Ewing, Keith Bartholomew, et al (2007). "Growing Cooler: The Evidence on Urban Development and Climate Change." Urban Land Institute. Available at <http://www.smartgrowthamerica.org/gcindex.html>.
65. The National Academies (2007). "Colorado River Basin Water Management: Evaluating and Adjusting to Hydroclimatic Variability." Available for download at http://www.nap.edu/catalog.php?record_id=11857.
66. The National Academies (2004). "Abrupt Climate Change: Inevitable Surprises." Available for download at http://www.nap.edu/catalog.php?record_id=10136.
67. The Consortium for Integrated Climate Research in Western Mountains (CIRMOUNT) (2006). "Mapping New Terrain: Climate Change and America's West." Available at http://www.fs.fed.us/psw/cirmount/publications/pdf/new_terrain.pdf.
68. James Hansen (2008). "Climate Threat to the Planet: Implications for Energy Policy and Intergenerational Justice." PowerPoint from Bjerknes Lecture given Dec. 17, 2008. Available for download under *Presentations & Links* at <http://www.columbia.edu/~jeh1/>.
69. Union of Concerned Scientists (2007). "Findings of the IPCC Fourth Assessment Report: Climate Change Science." *IPCC Highlights Series*. Available at http://www.ucsusa.org/assets/documents/global_warming/IPCC-WGI-UCS-summary-300dpi.pdf.
70. Levi Brekke, Julie Kiang, et al (2009). "Climate Change and Water Resources Management: A Federal Perspective." U.S. Department of the Interior and U.S. Geological Survey. Available at <http://pubs.usgs.gov/circ/1331/Circ1331.pdf>.

71. Transportation Research Board (2008). "Potential Impacts of Climate Change on U.S. Transportation." National Research Council of the National Academies. Available at <http://onlinepubs.trb.org/onlinepubs/sr/sr290.pdf>.
72. Transportation Research Board (2008). "Report in Brief: Potential Impacts of Climate Change on U.S. Transportation." National Research Council of the National Academies. Available at <http://onlinepubs.trb.org/onlinepubs/sr/sr290summary.pdf>.
73. Jim Giles (2007). "How to Survive a Warming World." *Nature*. Available at <http://www.geog.ox.ac.uk/news/articles/nature-article070412.pdf>.
74. David Adam (2008). "Too Late? Why Scientists Say We Should Expect the Worst." *The Guardian*, December 9, 2008. Available at <http://www.guardian.co.uk/environment/2008/dec/09/poznan-copenhagen-global-warming-targets-climate-change>.

For an example of a modest annotated bibliography, see the final page of this document: *Assessing Climate Risk for Freshwater-Dependent Economic Activity: A Survey for Drinking Water, Wastewater and Agricultural Enterprises*.

Corporate Climate Strategy, CSR and Carbon Disclosure

75. Carbon Disclosure Project. Available at <http://www.cdproject.net/>.
76. Ceres (2006). "Global Framework for Climate Risk Disclosure: A Statement of Investor Expectations for Comprehensive Corporate Disclosure." Available at http://www.unepfi.org/fileadmin/documents/global_framework.pdf.
77. Andrew Hoffman (2006). "Getting Ahead of the Curve: Corporate Strategies that Address Climate Change." The Pew Center on Global Climate Change. Available at www.pewclimate.org/docUploads/PEW_CorpStrategies.pdf.
78. Duncan Austin, Niki Rosinski, et al (2003). "Changing Drivers: The Impact of Climate Change on Competitiveness and Value Creation in the Automotive Industry." World Resources Institute. Available at http://pdf.wri.org/changing_drivers_full_report.pdf.
79. Andrew Aulisi, Amanda Sauer and Fred Wellington (2008). "Trees in the Greenhouse: Why Climate Change is Transforming the Forest Products Business." Available at http://pdf.wri.org/trees_in_the_greenhouse.pdf.
80. Jane Spencer (2007). "Big Firms to Press Suppliers on Climate." *The Wall Street Journal Online*, October 9, 2007. Available at <http://online.wsj.com/article/SB119186622895152448.html>.
81. Terry Macalister (2008). "Investment fund giants demand 90% reduction in carbon emissions." *The Guardian Online*, February 15, 2008. Available at <http://www.guardian.co.uk/money/2008/feb/15/investmentfunds.economics/print>.
82. Tom Walsh (2006). "Climate Change: Business risks and solutions. Risk Alert: A report for clients and colleagues of Marsh on risk-related topics." *Marsh*, Volume V, Issue 2. Available at [www.pewclimate.org/docUploads/Marsh%20-%20Climate%20Change%20Risk%20Alert%20\(April%202006\).pdf](http://www.pewclimate.org/docUploads/Marsh%20-%20Climate%20Change%20Risk%20Alert%20(April%202006).pdf).
83. Global e-Sustainability Initiative (2008). *Smart 2020: Enabling the low carbon economy in the information age*. Available at www.theclimategroup.org/assets/resources/publications/Smart2020UnitedStatesReportAddendum.pdf.
84. Doug Cogan, Megan Good, et al (2008). *Corporate Governance and Climate Change: Consumer and Technology Companies*. A Ceres Report. Available at <http://www.ceres.org/Document.Doc?id=398>.
85. CO2Stats.com (2009). "CO2Stats makes your site carbon neutral and shows visitors you're environmentally friendly." Available at <http://www.co2stats.com/>.
86. Renay San Miguel (2009). "Harvard Physicist Sets Record Straight on Internet Carbon Study." *TechNewsWorld*, January 12, 2009. Available at <http://www.technewsworld.com/story/Harvard-Prof-Sets-Record-Straight-on-Internet-Carbon-Study-65794.html>.

Energy, Economic Issues and Efficiency Opportunity

87. McKinsey & Company (2009). "Pathways to a Low-Carbon Economy." *Version 2 of the U.S. Greenhouse Gas Abatement Cost Curve*. Available at <http://globalghgcostcurve.bymckinsey.com/>.
88. Adam Newcomer, Seth Blumsack, et al (2008). "Short Run Effects of a Price on Carbon Dioxide Emissions from U.S. Electric Generators." *Carnegie Mellon Electricity Industry Center*. Available at <http://pubs.acs.org/doi/pdfplus/10.1021/es071749d?cookieSet=1>.
89. Annette Gydesen and Dorte Maimann (undated). "Life Cycle Analyses of Integral Compact Fluorescent Lamps Versus Incandescent Lamps." *Energy and Emissions*. Available at http://www.iaeel.org/IAEEL/Archive/Right_Light_Proceedings/Proceedings_Body/BOK1/200/1411.PDF.
90. Daniel M. Kammen (2008). "Science and Policy for Deep Cuts in Carbon Emissions." Available at <http://www.arb.ca.gov/research/seminars/kammen/kammen.pdf>.
91. McKinsey Global Institute (2006). "Productivity of growing global energy demand: A microeconomic perspective." Available at www.pewclimate.org/docUploads/McKinsey%20global%20energy%20report%20Nov.%202006.pdf.
92. Micheline Maynard (2008). "To Save Fuel, Airlines Find No Speck Too Small." *The New York Times*, June 11, 2008. Available at <http://www.nytimes.com/2008/06/11/business/11air.html>.
93. Rebecca Smith (2008). "Utilities, Plug-In Cars: Near Collision?" *The Wall Street Journal Online*, May 2, 2008. Available at <http://online.wsj.com/article/SB120969297862161675.html>.
94. Robert Shapiro, Nam Pham, et al (2008). "Addressing Climate Change Without impairing the US Economy." The US Climate Task Force. Available at http://www.climatechange.gov/pdf/CTF_CarbonTax_Earth_Spgs.pdf.
95. Ron Pernick, Clint Wilder, et al (2008). "Carbon-Free Prosperity 2025: How the Northwest Can Create Green Jobs, Deliver Energy Security, and Thrive in the Global Clean-Tech Marketplace." Available at <http://www.oit.edu/adx/asp/adxGetMedia.aspx?DocID=32347,32301,4503,1,Documents&MediaID=46158&Filename=Employment+Outlook+for+Energy+Engineers.pdf>.
96. Patrick Mazza (2008). "What About Nuclear Power?" *Climate Solutions*. Available at http://www.climatesolutions.org/publications/CS_What_About_Nuclear_Power_2008-01-08_68.pdf.
97. John Farrell and David Morris (2008). "Energy Self-Reliant States: Homegrown Renewable Power." The New Rules Project. Available at <http://www.newrules.org/de/energyselfreliantstates.pdf>.
98. Michael Grunwald (2008). "America's Untapped Energy Resource: Boosting Efficiency." *Time Magazine Online*, December 31, 2008. Available at <http://www.time.com/time/magazine/article/0,9171,1869224,00.html>.
99. Electric Power Research Institute (2009). "Assessment of Achievable Potential from Energy Efficiency and Demand Response Programs in the U.S. (2010–2030)." Available at <http://mydocs.epri.com/docs/public/0000000000001018363.pdf>.

Life-cycle GHGs and Carbon Footprints

100. Christopher Weber and Scott Matthews (2008). "Food-Miles and the Relative Climate Impacts of the Food Choices in the United States." *Environmental Science and Technology*. Available at <http://pubs.acs.org/doi/pdfplus/10.1021/es702969f>.
101. Mikhail Chester and Arpad Horvath (2008). "Environmental Life-cycle Assessment of Passenger Transportation: A Detailed Methodology for Energy, Greenhouse Gas and Criteria Pollutant Inventories of Automobiles, Buses, Light Rail, Heavy Rail and Air." UC Berkeley Center for Future Urban Transport. Available at http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1015&context=its/future_urban_transport.
102. Good Company (2007). "Oregon University System Greenhouse Gas Inventory." Available at http://www.ous.edu/dept/capcon/files/OUS_GHG_Inventory-July2007.pdf.

103. Apple (2008). *Apple and the Environment: Environmental Performance 2008*. At this web site, Apple gives a detailed product-level carbon footprint for most of its major products. Available at <http://images.apple.com/environment/resources/environmentalperformance.html>.
104. Climate Protection Campaign (2005). *Greenhouse Gas Inventory for all sectors of Sonoma County, California*. Available at <http://www.climateprotectioncampaign.org/news/documents/AirDistrict-PhaseTwo.pdf>.
105. Alan Snook and Renee Hurtado, DKS Associates (2007). "West Burnside/Couch Carbon Footprint Analysis." Technical memorandum for the City of Portland.
106. Energy Information Administration (2007). "Emissions of Greenhouse Gases in the United States 2006." Available at <ftp://ftp.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/ggrpt/057306.pdf>.
107. Franklin Associates, prepared for Athena Institute International (2006). "Life Cycle Inventory of Five Products Produced from Polylactide (PLA) and Petroleum-Based Resins." Available at http://www.athenasmi.ca/projects/docs/Plastic_Products_LCA_Summary_Rpt.pdf.
108. Jeffrey Ball (2008). "Six Products, Six Carbon Footprints." *The Wall Street Journal Online*, October 6, 2008. Available at <http://online.wsj.com/article/SB122304950601802565.html>.
109. City of Eugene Central Services, Facility Management Division (2007). *Eugene Community Greenhouse Gas Emissions Inventory Report (July 2007)*. Prepared by Lynne Eichner-Kelley and Glen Svendsen. Available at www.eugene-or.gov/portal/server.pt/gateway/PTARGS_0_235_252312_0_0_18/GHG%20Inventory%20Final%20070801.pdf.
110. Jonathan Norman, Heather MacLean and Christopher Kennedy (2006). "Comparing High and Low Residential Density: Life-Cycle Analysis of Energy Use and Greenhouse Gas Emissions." Available at <http://www.growingsensibly.org/cmapdfs/Comparing%20High%20and%20Low%20Residential%20Density%20-%20Life%20Cycle%20Analysis%20of%20Energy%20Use%20and%20Greenhouse%20Gas%20Emissions.pdf>.
111. Richard Wilson and Kyle Brown (2007). "When you can't build your way out of the problem: Evaluating greenhouse gas reduction strategies for suburban activity centers." Paper presented at *Planning for Climate Change on Campuses and in Communities*. Available at <http://www.csupomona.edu/~rwillson/willson%20brown%20acsp%2009%2028%2007.pdf>.
112. King County, Washington (2007). *King County Climate Action Plan*. Available at <http://www.metrokc.gov/exec/news/2007/pdf/ClimatePlan.pdf>.
113. Northwest Power and Conservation Council (2007). *Carbon Dioxide Footprint of the Northwest Power System*. Available at <http://www.nwcouncil.org/library/2007/2007-15.pdf>.
114. Environmental Protection Agency *Climate Change Webinar Series* (2008). "301: Accounting Systems, Modeling, and Economic Incentives." Available at [http://yosemite.epa.gov/r10/ECOCOMM.NSF/Programs/wcf/\\$FILE/301-1-presentation.pdf](http://yosemite.epa.gov/r10/ECOCOMM.NSF/Programs/wcf/$FILE/301-1-presentation.pdf).
115. Brenda Platt, David Ciplet, et al (2008). "Stop Trashing the Climate." Executive summary and full report available at <http://www.stoptrashingthecclimate.org/>.
116. Christopher Weber and Scott Matthews (2007). "Embodied Environmental Emissions in US Trade, 1997-2004." *Environmental Science & Technology*. Available at <http://pubs.acs.org/doi/pdf/10.1021/es0629110>.
117. Argonne National Laboratory (2008). *The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model*. Available at www.transportation.anl.gov/modeling_simulation/GREET/index.html.

Mandatory GHG Reporting (WA, OR, CA, WCI)

118. State web sites with information on rulemaking and scoping of mandatory reporting:
Washington: http://www.ecy.wa.gov/programs/air/globalwarm_RegHaze/GreenHouseGasreporting_rule.html
Oregon: <http://www.deq.state.or.us/aq/climate/rulemaking.htm>
California: <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>
119. Western Climate Initiative home page: <http://www.westernclimateinitiative.org/>
120. State of Washington 60th Legislature 2008 Regular Session (2008). "Engrossed Second Substitute House Bill 2815." Prepared by House Appropriations. Available at <http://www.leg.wa.gov/pub/billinfo/2007-08/Pdf/Bills/House%20Bills/2815-S2.E.pdf>.
(This is the legislation setting the basic guidelines for mandatory reporting in Washington State.)
121. New Mexico Air Quality Bureau (2008). *Greenhouse Gases Reporting*. "2009 Emissions Reporting Procedures" available for download at http://www.nmenv.state.nm.us/aqb/ghg/ghgrr_index.html.
122. British Columbia Ministry of Environment (2008). *Greenhouse Gas Reduction (Cap and Trade) Act (GGRCTA)*. "Policy Intentions Paper" available for download at <http://www.env.gov.bc.ca/epd/codes/ggrcta/reporting-reg.htm>.
123. U.S. Environmental Protection Agency (2008). *State Reporting: Electricity Disclosure, GHG Registry and Mandatory GHG Reporting*. Available at www.epa.gov/climatechange/wycd/stateandlocalgov/state_reporting.html.

Tools, Emissions Factors, Protocols and Calculators

124. California Climate Action Registry website. Available at <http://www.climateregistry.org/>.
125. Christian Jardine (2005). "Part 1: Calculating the Environmental Impact of Aviation Emissions." Environmental Change Institute. Available at http://www.stopstanstedexpansion.com/documents/Aviation_Emissions_&Offsets.pdf.
126. Christopher Frey and Po-Yao Kuo (2007). "Best Practices Guidebook for Greenhouse Gas Reductions in Freight Transportation." Prepared for U.S. Department of Transportation. Available at <http://cte.ncsu.edu/cte/downloads/research/ghg-guidebook.pdf>.
127. Clean Air Cool Planet (2008). *Information regarding climate solutions, climate impact and how to make your business more "green"*. Available at <http://www.cleanair-coolplanet.org/>.
128. The Climate Registry (2008). Reporting tips, references and policies. Available at <http://www.theclimateregistry.org/reference.html>.
129. Department for Environment Food and Rural Affairs (DEFRA) (2008). "2008 Guidelines to Defra's GHG Conversion Factors: Methodology Paper for Transport Emission Factor." Available at <http://www.defra.gov.uk/environment/business/envvp/pdf/passenger-transport.pdf>.
130. EIO-LCA: Economic Input-Output Life Cycle Assessment (2008). Free, Fast, Easy Life Cycle Assessment. Available at <http://www.eiolca.net/>.
131. Geoff Hammond and Craig Jones (2008). "Inventory of Carbon and Energy (ICE)." Available at <http://people.bath.ac.uk/cj219/>.
132. Global Reporting Initiatives and KPMG's Global Sustainability Services (2006). "Reporting the Business Implications of Climate Change in Sustainability Reports." Available at http://www.kpmg.nl/Docs/Corporate_Site/Publicaties/GRI_KPMG_CC_Report.pdf.
133. Katherine Hamilton, Ricardo Bayon, et al (2007). "State of the Voluntary Carbon Markets 2007: Picking Up Steam." New Carbon Financing and Ecosystems Marketplace. Available at http://ecosystemmarketplace.com/documents/acrobat/StateoftheVoluntaryCarbonMarket18July_Final.pdf.

134. Seattle Climate Action Plan (2008). Seattle Climate Partnership Tools and Resources, (carbon footprint calculator, curbing your climate impact resource guide along with other resources). Available at <http://www.ci.seattle.wa.us/climate/SCPresources.htm>.
135. Timothy Bovan, Ondroj Sklonar, et al. (2007). "Sustainable Urban Street Design." CH2M Hill. Available at <http://www.seattle.gov/transportation/docs/pmp/sustainablestreetsfinal6-22-07.pdf>.
136. U.S. Department of Labor (2008). "Bureau of Labor Statistics: Databases, Tables & Calculators by Subject." Available at <http://data.bls.gov/cgi-bin/surveymost?bls>.
137. U.S. Environmental Protection Agency (2008). *Climate Change: Waste*.
Main page: <http://epa.gov/climatechange/wycd/waste/tools.html>
Folders, Fact Sheets, and Case Studies: <http://epa.gov/climatechange/wycd/waste/factsheets.html>
Waste Reduction Model (WARM): http://epa.gov/climatechange/wycd/waste/calculators/Warm_home.html
138. U.S. Government Accountability Office (2008). "International Climate Change Programs: Lessons Learned from the European Union's Emissions Trading Scheme and the Kyoto Protocol's Clean Development Mechanism." Available at <http://www.gao.gov/new.items/d09151.pdf?source=ra>.
139. Vattenfall. Global Mapping of Greenhouse Gas, Reports & Publications. Available at <http://www.vattenfall.com/www/ccc/ccc/577730downl/index.jsp>.
140. World Resources Institute. *The Greenhouse Gas Protocol Initiative*. Available at www.ghgprotocol.org/.
141. U.S. Forest Service. Center for Urban Forest Research: Stratum. Street tree management and analysis tool for urban forest managers. Information about Stratum available at <http://www.fs.fed.us/psw/programs/cufr/stratum.shtml>.
142. U.S. Forest Service. Urban Forest Effects Model (UFORE). A computer model that calculates the structure, environmental effects and values of urban forests. Available at <http://www.ufore.org/>.
143. Multi-State Working Group on Environmental Performance (2008). "Spreadsheets Track Municipal Greenhouse Gases." Link for Carbon Footprint Assessment and Reduction (C-FAR) workbook available at <http://www.mswg.org/newsroom/index.php?cmd=detail&mod=9N10&id=124&show>. Instructions and tutorial available at http://morpc.org/pdf/C-FAR_Guidance_v3.pdf.
144. U.S. Environmental Protection Agency (2008). Climate Leaders Greenhouse Gas Inventory Protocol Core Module Guidance: Optional Emissions from Commuting, Business Travel and Product Transport. Climate Leaders, Office of Air and Radiation. Available at http://www.epa.gov/climateleaders/documents/resources/commute_travel_product.pdf.

Transportation, Land Use and Fuels

145. Clark Williams-Derry (2007). "Increases in greenhouse-gas emissions from highway-widening projects," backgrounder from Sightline Institute. Available at http://www.sightline.org/research/energy/res_pubs/analysis-ghg-roads.
146. Lisa Stiffler (2008). "Bio-debatable: Food vs. fuel." *Seattle Post-Intelligencer Online*, May 3, 2008. Available at http://seattlepi.nwsourc.com/local/361634_biodiesel03.html.
147. Marilyn Brown, Frank Southworth and Andrea Sarzynski (2008). "Shrinking the Carbon Footprint of Metropolitan America." Available at http://www.brookings.edu/~media/Files/rc/reports/2008/05_carbon_footprint_sarzynski/carbonfootprint_report.pdf.
148. Oregon Environmental Council (2008). "A Sustainable Economy." Available at <http://www.oeconline.org/our-work/economy>.
149. Reid Ewing, Keith Bartholomew, et al (2007). "Growing Cooler: The Evidence on Urban Development and Climate Change." Available at <http://www.1kfriends.org/documents/GrowingCooler9-18-07small.pdf>.

150. Alexander E. Farrell, Daniel Sperling, et al (2007). Research for California's low-carbon fuel standard, supported by the Energy Foundation:
 "A Low-Carbon Fuel Standard for California: Part 1: A Technical Analysis." Available at <http://repositories.cdlib.org/its/tsrc/UCB-ITS-TSRC-RR-2007-2/> and <http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1001&context=its/tsrc>.
 "A Low-Carbon Fuel Standard for California Part 2: Policy Analysis." Available at <http://repositories.cdlib.org/its/tsrc/UCB-ITS-TSRC-RR-2007-3/> and <http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1002&context=its/tsrc>.
151. Biomass Research and Development Initiative (2008). "Increasing Feedstock Production for Biofuels: Economic Drivers, Environmental Implications, and the Role of Research." Available at http://www.brdisolutions.com/Site%20Docs/Increasing%20Feedstock_revised.pdf.

Renewables and RECs

152. Database of State Incentives for Renewables & Efficiency (DSIRE) (2007). Summary Maps. Available at <http://www.dsireusa.org/library/includes/topic.cfm?TopicCategoryID=6>.
153. Lori Bird, Ed Holt and Ghita Carroll (2007). "Implications of Carbon Regulation for Green Power Markets." Available at <http://apps3.eere.energy.gov/greenpower/resources/pdfs/41076.pdf>.

Miscellaneous Resources of Note

154. Bob Davis (2008). "IMF Weighs In on Costs of Greenhouse-Gas Cutbacks." *The Wall Street Journal Online*, April 4, 2008. Available at http://s.wsj.net/article/SB120724425942086957.html?mod=fpa_whatsnews.
155. Environmental Protection Agency (2008). "EPA Analysis of the Lieberman-Warner Climate Security Act of 2008." Available at http://www.epa.gov/climatechange/downloads/s2191_EPA_Analysis.pdf.
156. Plug-in America (2008). Available at <http://www.pluginamerica.org/>.
157. Henning Steinfeld, Pierre Gerber, et al. (2006). *Livestock's long shadow: environmental issues and options*. LEAD Center. Available at <http://www.fao.org/docrep/010/a0701e/a0701e00.HTM>.
158. Daniel Lerch, Post Carbon Institute (2007). *Post Carbon Cities: Planning for Energy and Climate Uncertainty. A Guidebook on Peak Oil and Global Warming for Local Governments*. Available for purchase (\$30) at <http://www.postcarbon.org>.
159. Portland Peak Oil Task Force (2007). *Descending the Oil Peak: Navigating the Transition from Oil and Natural Gas*. Available at www.portlandonline.com/shared/cfm/image.cfm?id=145732.
160. Washington Climate Action Team (2008). "Leading the Way: Implementing Practical Solutions to the Climate Change Challenge." Available at http://www.ecy.wa.gov/climatechange/2008CATdocs/ltw_app_v2.pdf.
161. Intergovernmental Panel on Climate Change (2005). "Carbon Dioxide Capture and Storage: Summary for policymakers and technical summary." Available at http://arch.rivm.nl/env/int/ipcc/pages_media/SRCCS-final/SRCCS_SummaryforPolicymakers.pdf.
162. Dale Jamieson (2008). "The Post-Kyoto Climate: A Gloomy Forecast." *The Georgetown International Environmental Law Review*. Available at <http://philosophy.fas.nyu.edu/docs/IO/1192/postkyoto.pdf>.

Assessing Climate Risk for Freshwater-Dependent Economic Activity: A Survey for Drinking Water, Wastewater and Agricultural Enterprises

This brief bibliography provides a list of resources that attempt to capture the state of the scientific knowledge in one area of significant climate risk. The studies and analyses are highly uneven in their depth and certainty, and geographically quite scattered; these unfortunate shortcomings are indicative of the state of the science.

<p>1. Insights from 50,000 feet: science and policy</p>	<ul style="list-style-type: none"> • Regional climate change and ecological impacts, Lara M. Kueppers, School of Natural Sciences, University of California, Merced (PPT presentation). • The Brisbane Declaration (Environmental Flows¹ are Essential for Freshwater Ecosystem Health and Human Well-Being) • Evaluating Progress of the U.S. Climate Change Science Program: Methods and Preliminary Results, 2007. Committee on Strategic Advice on the U.S. Climate Change Science Program, Division on Earth and Life Studies, Division of Behavioral and Social Sciences and Education, NRC (www.nap.edu/catalog/11934.html). • Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments, The Climate Impacts Group; King County; in association with ICLEI – Local Governments for Sustainability. 2007. • Understanding Multiple Environmental Stresses: Report of a Workshop. Committee on Earth-Atmosphere Interactions: Understanding and Responding to Multiple Environmental Stresses, National Research Council, 2007.
<p>2. Focus on drinking water</p>	<ul style="list-style-type: none"> • Climate Change and Water Resources: A Primer for Municipal Water Providers, Kathleen Miller and David Yates, National Center for Atmospheric Research, published by the American Water Works Association (AWWA) Research Foundation.
<p>4. Focus on wastewater</p>	<ul style="list-style-type: none"> • A Screening Assessment of the Potential Impacts of Climate Change on the Costs of Implementing Water Quality-Based Effluent Limits at Publicly-Owned Treatment Works in the Great Lakes Region (External Review Draft Report), U.S. Environmental Protection Agency, Office of Research and Development National Center for Environmental Assessment Global Change Research Program, September 2006. • A Screening Assessment of the Potential Impacts of Climate Change on Combined Sewer Overflow (CSO) Mitigation in the Great Lakes and New England Regions – External Review Draft Report. U.S. EPA, Office of R & D, National Center for Environmental Assessment, Global Change Research Program. John Furlow, Thomas Johnson, Britta Bierwagen, and ICF International (J. Randall Freed, Jeremy Sharfenberg, Sarah Shapiro). September 2006.
<p>5. Focus on ecosystem services and watersheds</p>	<ul style="list-style-type: none"> • Global Change Impacts on Freshwater Ecosystem Services of the Sacramento Watershed, California USA – Final Report to the Environmental Protection Agency's- Office of Research and Development, David Yates, David Purkey, Hector Galbraith, Annette Huber-Lee, Jack Sieber and Brian Joyce • Uncertain Future: Climate change and its effects on Puget Sound – Foundation Document, Mote, P.W., A.K. Snover, L. Whitely Binder, A.F. Hamlet, and N.J. Mantua, 2005. Climate Impacts Group, Center for Science in the Earth System, Joint Institute for the Study of the Atmosphere and Oceans, University of Washington. • Potential Impacts of Climate Change on Ecological Resources and Biodiversity in the San Pedro Riparian National Conservation Area, AZ, A report to EPA from the American Bird Conservancy Nov. 2005. • Climate and Land Use Change Effects on Ecological Resources in Three Watersheds: A Synthesis Report (External Review Draft Report). EPA Global Change Research Program. Susan H. Julius, Britta G. Bierwagen, and Thomas E. Johnson, and Randall Freed, Susan Asam, Sarah Shapiro (of ICF International, Inc.). August 2006. U.S. EPA Office of Research and Development, National Center for Environmental Assessment, Global Change Research Program. • Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources. Synthesis and Assessment Product 4.4. U.S. Climate Change Science Program. Draft for public comment – Aug. 2007. • Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources, Government Accountability Office, August 2007.
<p>6. General strategies</p>	<ul style="list-style-type: none"> • Water 2010: A “Near Sighted” Program of Water Resource Management Improvements for the Western United States. William Blomquist. November 2007 • In Hot Water: Water Management Strategies to Weather the Effects of Global Warming. Principal Authors: Barry Nelson, Monty Schmitt, Ronnie Cohen, Noushin Ketabi (NRDC), Robert C. Wilkinson (UC Santa Barbara). July 2007.