

Barbara Haya, PhD

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EDUCATION

University of California, Berkeley Energy & Resources PhD 2010

Dissertation title: [Carbon Offsetting: An Efficient Way to Reduce Emissions or to Avoid Reducing Emissions? An Investigation and Analysis of Offsetting Design and Practice in India and China](#)

University of California, Berkeley Energy & Resources MS 2002

Villanova University Philosophy BA 1991

MAJOR PROJECTS

Director, Berkeley Carbon Trading Project, a project of the Goldman School of Public Policy Environmental Center, University of California, Berkeley (2015-present)

The Berkeley Carbon Trading Project is a coordinated research and policy outreach program focused on the effectiveness of carbon trading and offsetting programs. We perform research on carbon offset quality, and engage with policy and program development based on our research results.

Project Lead, Developing University of California's Carbon Offset Procurement Strategy, a project of the California Institute for Energy and Environment, University of California, Berkeley (2018-2022)

Working with the University of California to develop the system's strategy for procuring carbon offsets for use towards meeting the system's carbon neutrality goals. We are researching the quality of a range of offset projects with credits on the voluntary offset market. We are also running a pilot program, supporting the University of California in developing its own offset projects growing out of and supporting University research.

Stanford Law School, Research Fellow, Stanford, CA (Spring 2013-Spring 2015)

Led an interdisciplinary team of law and PhD students in a coordinated research and policy engagement program on California's expanding carbon offset program. Our goal was to support the development of an offsets program that effectively reduces emissions, and only credits emissions reductions that are real, additional, verifiable, and conservatively estimated. Our work focused on two new carbon offset protocols developed by California: Mine Methane Capture and Rice Cultivation.

Union of Concerned Scientists, Consultant, Berkeley, CA (Spring 2011-Spring 2013)

- Researched and advocated for procedures under California's global warming law for evaluating new and existing offsets protocols and overseeing the report verification process, to ensure carbon credits generated have a high likelihood of representing real and additional emissions reductions.
- Co-authored report analyzing the performance of California's publicly owned utilities towards meeting the state's 2010 Renewables Portfolio Standard

Lawrence Berkeley National Lab – China Energy Group, Graduate Student Researcher

Berkeley, CA (Spring 2010)

Analyzed the design of a sectoral crediting program that would support improved efficiency in the cement sector in Shandong province in China and credit emissions reductions from those support efforts.

International Rivers, Consultant, Berkeley, CA (2002-2009)

- Served as coordinator of the Climate Action Network Flexible Mechanisms working group for COP 14 in Poznan. CAN coordinates the efforts of 500+ NGOs at the international climate change negotiations.
- Led the drafting of four position papers on the Clean Development Mechanism (CDM, the Kyoto Protocol's carbon offset program) by consensus among Climate Action Network member organizations.
- Submitted analysis and recommendations to the CDM Executive Board on the functioning of the CDM and CDM reform, proposed CDM baseline and monitoring methodologies, and hydropower projects applying for CDM registration.

The Energy and Resources Institute (TERI), Fulbright Scholar, New Delhi (Summer-Fall 2006)

Analyzed the role of the CDM in supporting low carbon development in India.

Winrock International, Kathmandu, Nepal (Summer 2001)

Developed PCF, GEF and CDM proposals for selling carbon reduction credits from clean energy and transportation projects in Nepal.

Pelangi, Jakarta, Indonesia (Summer 2000)

Performed interview-based research to understand how stakeholders have influenced power sector restructuring in Indonesia towards social and environmental goals.

PEER-REVIEWED PUBLICATIONS & WORKING PAPERS

Claudia Herbert, **Barbara K. Haya**, Scott L. Stephens, & Van Butsic (2022) Managing nature-based solutions in fire-prone ecosystems: Competing management objectives in California forests evaluated at a landscape scale. *Frontiers in Forests and Global Change*, 5, 957189.

<https://doi.org/10.3389/ffgc.2022.957189>

Grayson Badgley, Jeremy Freeman, Joseph J. Hamman, **Barbara Haya**, Anna T. Trugman, William R.L. Anderegg, Danny Cullenward (2021) Systematic over-crediting in California's forest carbon offsets program. *Global Change Biology*, DOI: [10.1111/gcb.15943](https://doi.org/10.1111/gcb.15943)

Barbara Haya, Danny Cullenward, Aaron L. Strong, Emily Grubert, Robert Heilmayr, Deborah Sivas, Michael Wara (2020) Managing Uncertainty in Carbon Offsets: Insights from California's Standardized Approach. *Climate Policy*, DOI: [10.1080/14693062.2020.1781035](https://doi.org/10.1080/14693062.2020.1781035)

Barbara Haya (2019) [The California Air Resources Board's US Forest offset protocol underestimates leakage](#). Goldman School of Public Policy Working Paper, University of California, Berkeley

Barbara Haya, Aaron Strong, Emily Grubert, Danny Cullenward (2016) Carbon Offsets in California: [Science in the Policy Development Process](#). In *New Trends in Communicating Risk and Resiliency: A Multi-Disciplinary Approach to Global Environmental Change*, eds. J. Eichelberger, K. Taylor & Y. Kontar. Springer

Barbara Haya & Payal Parekh (2011) [Hydropower in the CDM: Examining Additionality and Criteria for Sustainability](#). Energy & Resources Group Working Paper ERG11-01, University of California, Berkeley

Barbara Haya (2009) [Measuring Emissions Against an Alternative Future: Fundamental Flaws in the Structure of the Kyoto Protocol's Clean Development Mechanism](#). Energy & Resources Group Working Paper ERG09-01, University of California, Berkeley

- Barbara Haya**, Malini Ranganathan, Sujit Kirpekar (2009) Barriers to sugar mill cogeneration in India: insights into the structure of post-2012 climate financing instruments. *Climate and Development* 1:66-81. DOI:[10.3763/cdev.2009.0002](https://doi.org/10.3763/cdev.2009.0002)
- Lara M. Kueppers, Paul Baer, John Harte, **Barbara Haya**, Laura E. Koteen, and Molly E. Smith (2003) A decision matrix approach to evaluating the impacts of land-use activities undertaken to mitigate climate change. *Climatic Change*, 63:247-257. DOI: [10.1023/B:CLIM.0000018590.49917.50](https://doi.org/10.1023/B:CLIM.0000018590.49917.50)
- Paul Baer, John Harte, **Barbara Haya**, Antonia V. Herzog, John Holdren, Nathan E. Hultman, Daniel M. Kammen, Richard B. Norgaard, Leigh Raymond (2000) Equity and Greenhouse Gas Responsibility. *Science*, DOI: [10.1126/science.289.5488.2287](https://doi.org/10.1126/science.289.5488.2287)

PUBLICATIONS CURRENTLY UNDER REVIEW

- Barbara Haya**, Samuel Evans, Letty Brown, Jacob Bukoski, Van Butsic, Bodie Cabiyo, Rory Jacobson, Amber Kerr, Matthew Potts, Daniel L. Sanchez (under review) Comprehensive Review of Carbon Quantification by Improved Forest Management Offset Protocols. Submitted to *Frontiers in Forests and Global Change*.
- Jared Stapp, Christoph Nolte, Matthew Potts, Matthias Baumann, **Barbara Haya**, Van Butsic (under review) Early indications of effectiveness in California's forest offset program. Submitted to *Nature Communications*.

OTHER PUBLICATIONS

- Thomas Damassa, Taryn Fransen, Mengpin Ge, Krisztina Pjeczka, **Barbara Haya**, and Katie Ross (2015) [Interpreting INDCs: Assessing Transparency of Post-2020 Greenhouse Gas Emissions Targets for 8 Top-Emitting Economies](#). World Resources Institute, Washington, DC
- Laura Wisland and **Barbara Haya** (2012) [The Clean Energy Race: How Do California's Public Utilities Measure Up?](#) Union of Concerned Scientists, Berkeley
- Alexander E. Farrell, Daniel Sperling, et al., (2007) A low carbon fuel standard for California, [Part I: Technical Analysis](#) & [Part II: Policy Analysis](#). UC Berkeley Transportation Sustainability Research Center

PROFESSIONAL SERVICE

- Member of the Board of Directors, Carbon Market Watch, an NGO monitoring outcomes and development of carbon trading programs under UN agreements and around the world
- Served as a member of the Taskforce on Scaling Voluntary Carbon Markets' Credit-level Integrity Working Group
- Observed seven Conferences of the Parties to the UN Framework Convention on Climate Change (the annual international climate change negotiations)
- Reviewed manuscripts for Science, Climatic Change, Climate Policy, Energy Policy, and Carbon Management