

DANIEL M. KAMMEN

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<http://rael.berkeley.edu>
Married, two daughters (Folasade, Omolara)

Renewable and Appropriate Energy Laboratory (RAEL) • <http://rael.berkeley.edu>

RESEARCH INTERESTS

Science and technology policy focused on energy, development and environmental management. Technology and policy questions in developing nations, particularly involving: the linkages between energy, health, and the environment; technology transfer and diffusion; household energy management; renewable energy; women; minority groups. Global environmental change including deep cuts in greenhouse gas emissions and resource consumption. Environmental and technological risk. Management of innovation and energy R&D policy. Geographic focus: Africa; Latin America, USA.

KEY ACTIVITIES

Named by Secretary of State Hilary R. Clinton to be the first Clean Energy Fellow to the Americas, April 15, 2010.

National Technical Advisory Board, U. S. Environmental Protection Agency, 2010 - .

Envoy to the Americas for Clean Energy and Development, in service to Secretary of State, Hilary R. Clinton, 2010 - .

Member, National Academy of Science's Computing Research for Environmental and Societal Sustainability, 2010 – 2015.

Member, National Academy of Science, Board on Global Science and Technology, 2009 - 2014

Economic and Allocation Advisory Committee (EAAC) Appointed by Governor Schwarzenegger, 6-30-09: Mandate to develop the greenhouse gas cap and trade market rules and recommend revenue allocation policies.

Coordinating lead author for the Intergovernmental Panel on Climate Change (IPCC) Special Report on Renewable Energy Sources and Climate Change Mitigation (2009 – 2011).

Host/'Energy Czar' of the 5 part *Science Channel* TV series 'Ecopolis' (2008/9).

Copenhagen Climate Council (invited/elected member August 2008)

President, AAAS Section X (Societal Impacts of Science and Technology) American Association for the Advancement of Science (2009 – 2010).

Co-Developer of Property Assessed Clean Energy [PACE] Financing Model: energy efficiency and solar energy financing plan that permit installation of clean energy systems on residences with no up-front costs. Named by Scientific American as the #1 World Changing Idea of 2009. (co developer with Cisco DeVries).

Chairman of the Research Board, Enphase Energy (Petaluma, CA), company to develop micro-inverters for solar photovoltaic systems and energy efficiency services (2008 - present).

Nobel Peace Prize (2007), Intergovernmental Panel on Climate Change, Contributing Lead Author on IPCC Reports (2000 – present).

Distinguished Citizen Award, Sustainable Energy, Commonwealth Club of California (2007).

Energy Biosciences Institute, Proposal lead-author and Executive Committee Member, \$500 million BP funded institute on sustainable biofuels.

Conducted first ever field-based exposure-response study in rural developing nations (Laikipia, Kenya, 1993- 2002). Publication *The Lancet, Science, Scientific American*.

21st Century Earth Award (Japan, 1993): for research addressing the amelioration or solution of such global environmental problems as climate change, deforestation or biodiversity preservation Citation:

For research aimed at reducing greenhouse gas emissions and improving environmental health in developing nations: a proposal for energy management, cooking technology, and education.

BUSINESS and PRIVATE SECTOR EXPERIENCE

Board of Directors, *Imara Energy* (Menlo Park, CA), 2009 - 2010

Member of the Research Board, *Enphase Energy Inc.* (Petaluma, CA). 2008 -

Board of Directors, *Electricity du Portugal – Renewables* (Madrid, Spain, LLC). 2008 -

Corporate Board, *Direct Carbon, Inc.* (Fuel cell company), San Francisco, CA. 2008 -

EDUCATION

Ph.D.	Harvard University	Physics	June 1988
M.A.	Harvard University	Physics	June 1986
A.B.	Cornell University	Physics (cum laude)	May 1984

POSITIONS HELD

2008 -	Director, Transportation Sustainability Research Center (TSRC), Institute of Transportation Studies, University of California, Berkeley
2007 - 2009	Executive Committee, Energy Biosciences Institute (UCB/LBL/UIUC); \$500 million biofuels institute funded by BP
2005 -	Co-Director, Berkeley Institute of the Environment
2004 -	Class of 1935 Distinguished Chair in Energy
2001 -	Professor of Public Policy in the Goldman School of Public Policy, University of California, Berkeley
2001 -	Professor in the Energy and Resources Group, University of California, Berkeley
2001 -	Professor of Nuclear Engineering, University of California, Berkeley
1999 -	Founding Director, (R enewable and A ppropriate E nergy L aboratory; RAEL) University of California, Berkeley
1999 - 2001	Associate Professor of Nuclear Engineering, University of California, Berkeley
1998 - 2001	Associate Professor in the Energy and Resources Group (ERG), University of California, Berkeley
1997 - 1999	Chair, Science, Technology & Environmental Policy Program (STEP), Woodrow Wilson School of Public and International Affairs, Princeton University
1997 - 1999	Class of 1934 Preceptor, Woodrow Wilson School of Public and International Affairs
1993 - 1999	Assistant Professor of Public and International Affairs, Woodrow Wilson School of Public and International Affairs, Princeton University
1993 - 1999	Research Faculty, Center for Energy and Environmental Studies, School of Engineering and Applied Science, Princeton University
1993 -	Permanent Fellow, African Academy of Sciences
1991 - 1993	Research Associate, Northeast Regional Center for Global Environmental Change, and the Department of Physics, Harvard University
1991 - 1993	Affiliate Fellow, Center for Science and International Affairs, John F. Kennedy School of Government, Harvard University
1988 - 1991	Weizmann & Bantrell Postdoctoral Research Fellow in the Division of Engineering and Applied Science, and the Division of Biology, California Institute of Technology

TEACHING

University of California, Berkeley

- Advanced Public Policy Analysis (Pub Pol 290 & 205)
- Wind Energy (ER291) (with Dr. Alex Farrell)

- Photovoltaic Materials (ER226) (with Dr. Eicke Weber/Prof. Eugene Haller)
- Environmental Classics (ER290) (with Dr. Isha Ray)
- Methods in Interdisciplinary Studies ('Tricks of the Trade') (ER292B)
- Freshman Seminar: The Century of Fossil Fuels, the Century of Global Warming (ER24)
- Energy and Society (ER100/200) & (PubPol 184/284)
- Renewable Energy (ER120)
- The Politics of Climate Change Policy (ER290) [faculty advisor]
- Energy and Development (ER290)
- Group Studies in Energy Research (ER298)
- Individual Research in Energy (ER299)
- Issues in Nuclear Science and Technology (NE39) (team taught)
- Honors Research – Environmental Science, Policy and Management (ESPM, College of Natural Resources, H196)

Princeton University

- Environment and Development (WWS 571b)
- Technology Transfer and Development (WWS 571c)
- Methods in Science, Technology and Public Policy (WWS 589)
- Process and Methods in Science and Technology Policy (WWS 308)
- Topics in Renewable Energy Conversion (MAE 319) (team taught)
- Science, Technology and Public Policy (WWS 304)
- Environmental Science and Policy (ENV 201) (team taught)

Harvard University

- Senior Engineering Thesis Research (Engineering Sciences 96r)
- Biomass, Land Management, and Environmental Change (Chair, Working Group) John F. Kennedy School of Government

California Institute of Technology

- Tropical Development and Conservation (Biology 23)

POSTDOCTORAL ADVISEES

- 2008 - 2009 **Felix Cruetzig** (Ph.D. 2008) Free University of Berlin. Energy-climate models; sustainable cities.
- 2004 - 2005 **Magda Moner y Girona** (Ph.D. 2002) University of Barcelona, Spain, Materials Science
Current: Senior Research Scientist, ISPRI, Italy
- 2004 - 2005 **Frank Ling** (Ph.D. 2003) University of California, Berkeley, Chemistry
Current: Science fellow, Tsubuka Science City (Japan).
- 2000 - 2004 **Timothy Lipman** (Ph.D. 1999) University of California, Davis, Environmental Policy Analysis/Graduate Group in Ecology; Institute of Transportation Studies - Davis)
Current: Research Scientist, Institute of Transportation Studies, UC Berkeley
- 2000 - 2002 **Antonia Herzog** (Ph.D. 1997, University of California, San Diego, Physics). UC Presidential Postdoctoral Fellow, 2000 – 2001
Current: Senior Policy Researcher, Natural Resources Defense Council, Washington, DC.

- 1998 - 2001 **Lloyd Connelly** (Ph.D. 1998, University of California, Berkeley, Mechanical Engineering; M. D., University of California, Davis).
Current: University of California, Davis, Resident, Internal Medicine
- 1997 - 1999 **Daniel Klooster** (Ph.D. 1997, University of California, Los Angeles, Geography)
Current: Professor of Geography, Florida State University
- 1996 – 1997 **Lisa Naughton** (Ph.D. 1996, University of Florida, Wildlife Ecology)
Current: Assistant Professor of Geography, University of Wisconsin, Madison.

DOCTORAL DISSERTATION ADVISEES (UCB students unless indicated)

- 2008 - Kevin Fingerman (ERG) “Water and climate change”
- 2008 - Cathy Kunkle (ERG) “Community energy strategies for sustainability”
- 2009 – Autumn Petros-Good (ERG) “Dynamic modeling of energy supply and transmission”
- 2009 – James Nelson (Chemistry) “Dynamic modeling of energy supply and transmission”
- 2008 – Josiah Johnston (ERG) “Dynamic modeling of energy supply and transmission”
- 2007 – Christian Casillas (ERG) “Rural energy and development strategies”
- 2007 – Zachary, Norwood (ERG) “Solar thermal energy systems”
- 2006 - Niels Tomijima (ERG)
- 2006 - Claire Woo (Chemical Engineering)
- 2006 - 2008 Daniel Prull, “Wind energy engineering”
- 2006 - Anand Gopal, “Bioenergy Electrochemistry”
- 2005 - Carla Peterman, “Innovation and implementation in the energy sector”.
- 2005 – 2009 Cyrus Wadia, “Development of novel nano-solar technologies”
- 2004 - 2009 Charles Kirubi (ERG) Dissertation: *Assessment of Community-Based Electric Micro-grids as an Option for Off-grid Rural Electrification in Kenya*
Current: White House Office of Science and Technology Policy: Renewable Energy Policy Specialist
- 2005 - Derek Lemoine, “Real options analysis of electrified transportation options”
- 2005- Malini Ranganathan, “Power Sector Reform and Development in Senegal”
Current: Assistant Professor, Kenyatta University, Nairobi, Kenya
- 2004 - 2008 Renee Kuriyan (Co-Chair with Isha Ray)
- 2003 - 2007 Gregory Nemet, “Energy R&D Policy”
- 2002 - 2009 Tracey Osborne, “Biomass and Development in Latin America”
- 2003 – 2008 Matthias Fripp, “Optimal investments in low-carbon energy infrastructure”
Current: Lecturer, Environmental Change Unit, Oxford University
- 2001 - 2008 Rebecca Ghanadan, “Energy and Globalization in the Tanzanian Market”, Link Energy Fellow, 2003 – 2005; Chancellor’s Dissertation Fellow (2006/7)
- 2001 - 2008 Kamal Kapadia, ‘Renewable Energy for Development’
Link Energy Fellow, 2004 – 2006
Current: Lecturer, Environmental Change Unit, Oxford University
- 2000 - 2003 Nate Hultman, “Carbon Markets, Climate Change Science and Policy”, NASA Earth Sciences Doctoral Fellow, 2000 – 2003.
Current: Assistant Professor of International Environmental Policy, University of Maryland.

- 1999 - 2004 Andrew MacAllister, “Renewable energy infrastructure”, Link Energy Fellow, 1999-00
- 2000 - 2005 Joanna Lewis, “Wind energy infrastructure in China”
Current: Assistant Professor of International Environmental Policy, Georgetown University.
- 1999 - 2003 Donna Green, “Solar battery charging, development, and politics in Thailand”.
Current: Lecturer, University of New South Wales, Environmental Studies.
- 1999 - 2005 Robert Bailis, “Renewable energy and development”, FLAS Fellow, 1999-2000. Link Energy Fellow, 2002 – 2004.
Current: Assistant Professor, Yale School of Forestry and Environmental Studies, Yale University.
- 1998 - 2004 Arne Jacobson, “Renewable energy and development” Link Energy Fellow, 2000 – 2001.
Current: Assistant Professor, Environmental Science, and Researcher, Schatz Energy Laboratory, Humboldt State University.
- 1998 - 2004 Chris Greacen, “Renewable energy and development”, US EPA STAR Fellow, 1998 - 2001.
Current: President, Pelangi Thai
- 1997 - 2001 Richard D. Duke (STEP, Princeton) “Economics of renewable energy technologies” (Link Energy Foundation Fellow, ‘98 - ‘99; US EPA STAR Fellow, 1998 - 2001). Thesis: *Clean Energy Technology Buydowns: Economic Theory, Analytic Tools, and the Photovoltaics Case*
Current: Senior Financial Analyst, MacKenzie Consulting, New York City, NY.
- 1996 - 1999 Katherine Purvis (Chemistry, Princeton) “Toxic Paint Solvents and Worker Exposure in Kenya” (PEI-RISE; with S. Bernasek, Chemistry)
Current: Associate Professor of Chemistry and Environmental Studies, The Claremont Colleges, Claremont, California
- 1996 - 2001 Robert Margolis (STEP, Princeton) "US energy R&D and innovation"
Current: Senior Policy Advisor, National Renewable Energy Laboratory (Washington, D. C. Office).
- 1995 - 2000 David Hassenzahl (STEP, Princeton). Thesis: *Comparative Environmental Regulation and Risk Management*
Current: Associate Professor of Science Policy, University of Nevada, Las Vegas (Greenspun School of Public Policy)
- 1995 - 2000 Majid Ezzati, (STEP, Princeton). Thesis: *Energy Technology, Indoor Air Pollution, and Respiratory Infections in Developing Countries: A Field Study from Central Kenya* (SSRC International Pre-Dissertation Fellow, ‘97 - ‘98).
Current: Associate Professor of Public and International Health, Harvard University School of Public Health
- 1994 - 1997 Amy F. Richardson (WWS, Princeton), *People, Preferences, Parties and PAC's: Constituent Representation in the Senate on Environmental Issues* (with L. M. Bartels).
Current: Senior Fellow, Environmental Policy Analysis, The Rand Corporation, Pittsburgh, PA.

Dissertation Committees (not serving as chair):

- 2009 Corinne D. Scown, Civil and Environmental Engineering

- 2008 - 2008 Rebecca Jones, Materials Science
 2005 - 2008 Xuan Chen, Materials Science
 2005 - 2008 Pedro Viera, Civil Engineering, Life-Cycle Assessment
 2004 - 2006 Brenda Haendler, Civil and Environmental Engineering
Current: AAAS Fellow (Department of State)
 2002 - 2005 Tonio Buonosissi, Materials Science, Photovoltaic Materials
 1999 - 2005 Paul Baer, ERG, UC Berkeley
 2001 - 2005 Daniel Glaser, Independent Doctoral Program, Visual Information Design
 1998 - 2002 Chris Stipe (Mechanical Engineering, UC Berkeley)
Current: Postdoctoral Fellow, Lawrence Berkeley National Laboratory
 1997 - 2001 Teresa Holloway, Atmospheric and Oceanic Studies, Princeton University
Current: Assistant Professor in the Gaylord Nelson Institute for Environmental Studies, Center for Sustainability and the Global Environment (SAGE), and the Energy
 1993 - 1997 Georgios Kassinis, WWS, Princeton University
Current: Associate Professor of Public Policy, University of Cyprus, Greece.

UNDERGRADUATE THESIS ADVISEES

- 1999 - 2000 Advised 4 undergraduate senior projects (UC Berkeley), departmental honors (3)
 1998 - 99 Advised 7 senior theses (Princeton University)
 1996 - 97 Advised 6 senior theses (Princeton University)
 Student honors include: Marshall Fellowship, a Fulbright Scholarship (to Kenya); the Westoff Prize in Demography; Woodrow Wilson School Senior Thesis Prize; Princeton Environmental Institute Senior Thesis Prize; Civil Engineering and Operations Research Senior Thesis Award (CEOR Prize).
 1995 - 96 *On leave*: Advised 1 senior thesis (Princeton University)
 Student honors include: the Lieutenant John A. Larkin, Jr. Memorial Prize (WWS); and the Environmental Studies Senior Thesis Award from the Princeton Environmental Institute.
 1994 - 95 Advised 7 senior theses (Princeton University)
 Student honors include: a Rhodes Fellowship; a Marshall Fellowship; Princeton University's Pyne Prize; and a Fulbright Scholarship (to Mexico)
 1993 - 94 Advised 5 senior theses (Princeton University)
 Student honors include: the Gaile F. Johnson Prize in Public Affairs (WWS); and a Fulbright Scholarship (to Kenya)
 1992 - 93 Advised 2 senior theses (Harvard University)
 Including one nominated for a Hoopes Prize
 1991 - 92 Advised 2 senior theses (Harvard University)

EXTERNAL RESEARCH FUNDING AWARDS (Principal Investigator unless noted)

Current & Past Support:

- 2009 – 2011 U. S. Department of Energy Pacific Region Clean Energy Application Center, \$1,500,000.
- 2009 – 2010 Vestas, LLC, “Wind energy design strategies”, \$277,000
- 2009 Congressional Research Service, Energy Planning Grant, \$50,000
- 2008 – 2010 California Air Resources Board, “Feebates and greenhouse gas management in California”, UC Davis/UC Berkeley, \$450,000.
- 2007 – 2017 The Energy Biosciences Institute, Primary Author and Section Coordinator, Global Systems and Impacts Section, British Petroleum, \$500 million
- 2006 – 2007 Santa Barbara Green Development Coalition, \$25,000
- 2006 Americans for Energy Independence, \$20,000
- 2006 - The Karsten Family Foundation Endowment Gift for the Renewable and Appropriate Energy Laboratory, \$400,000
- 2006 – 2008 Urban Sustainability Institute, the Gordon and Betty Moore Foundation, ‘Sustainable Urban Settlements, \$1,150,000/year
- 2006 - 2008 PIER-EA EEGP Application for Project entitled "Optimization of Novel Distributed Energy Networks to Reduce Greenhouse Gas emissions in California", \$75,000 (co-PI with Stephen Schneider, Stanford University).
- 2005 – 2008 “Resources Policy Internship Program”, California Public Utilities Commission, \$550,000
- 2005 – 2006 Planning Grant, the Gordon and Betty Moore Foundation, ‘Sustainable Urban Settlements (joint with the National Academies of Science): \$745,000 (\$342,000 to the University of California).
- 2004 – 2005 U. S. Environmental Protection Agency, “Analysis of Innovation Potential for Energy Efficiency”, \$50,000
- 2004 - 2005 National Renewable Energy Laboratory, \$28,000.
- 2004 - 2009 UC Berkeley/ITRI (Industrial Technology Research Institute, Republic of Taiwan): manager, with Prof. A. Majumdar, of \$500,00/year research program (tentative duration: 5 years, \$2,500,000).
- 2005 - US DoE/California Energy Commission, “CHP Research and Outreach Center”, \$650,000
- 2003 – 2004 Kirsch Foundation, “A Hydrogen Pathway for California”, 20,000
- 2003 – 2004 California Energy Commission/PIER Program, “Wind-hydrogen development”, \$75,000.
- 2003 - 2004 “A Review of Approaches to Advanced Power Technology Programs in the United States and Abroad Including Linked Mobile and Stationary Sector Developments”, California Air Resources Board, \$63,000.
- 2002 – 2003 California Air Resources Board, “Review of power generation options”, \$65,000.
- 2002 - 2005 Sandia National Laboratory, “Modeling hydrogen/renewable energy power parks”, \$90,000
- 1999 - “Research, education and outreach on energy and sustainable societies” The Energy Foundation, (San Francisco, CA), \$1,050,000.
- 2000 Solo Energy Corporation. Unrestricted gift to support RAEL, \$40,000.
- 2000 – 2001 Core Management Team (with E. Vine [LBL], J. Sharpless [former CEC Commissioner], J. Quinn [UC Davis], K. Birkinshaw [CEC]), California Energy Commission, Public Interest Environmental Research – Environmental Area (PIER-EA), \$10,500,000 annual program budget.
- 2001 – 2002 “UV Water Purification Technology for Development”, Award Winning Entry, the World Development Marketplace Competition, \$100,500.

- <http://www.developmentmarketplace.org/html/results.html#DMAward>
- 2000 – 2001 Faculty Research Grant (COR), “Sustainable Renewable Energy Markets”, \$5600.
- 2000 – 2004 “Resources Policy Internship Program”, California Public Utilities Commission, \$815,000.
- 2000-2002 “Biomass Energy For Sustainable Economic, Social, And Environmental Development In Zimbabwe”, Shell Environmental Initiative (London, UK), \$260,000.
- 1999 - 2000 “Photovoltaic System Field Evaluation and Training Program for East Africa”, \$54,000, The Lewis Anthony Dexter Charitable Trust (Chicago, Illinois, USA).
- 1999 - 2000 “Dissemination of Small-scale UV Water Disinfection Systems in Southern Mexico: Support and Evaluation”, \$12,000, The Lewis Anthony Dexter Charitable Trust (Chicago, Illinois, USA).
- 1998 - 2000 Co-PI (w/Lisa Naughton, University of Wisconsin) “Resource Access and Environmental Change: An Analysis of the Linkages Between Forest Property Rights, Biofuel Management, and Ecological Impacts in western Uganda”, \$50,000, National Science Foundation Grant SBR 98-10144; Division of Geography and Regional Science.
- 1996 - 1998 "Community Energy, Ecology and Health Management: Laikipia, Kenya". The Summit Foundation, Washington, DC, \$198,000.
- 1996 - 1998 “Sustainable development in Molo, Kenya,” \$95,211. The Dubois Fund, Houston, TX.
- 1996 - 1998 "Community Energy, Ecology and Health Management: Laikipia, Kenya". The Compton Foundation, Menlo Park, CA, \$25,000.
- 1995 - 1996 MacArthur Foundation grant for student-faculty collaborative research, \$7,600.
- 1993 - 1995 "Engineering and policy analysis of renewable energy technology transfer: solar and nuclear energy," Department of Energy, Northeast Regional Center for Global Environmental Change, \$66,500.
- 1993 - 1994 Research Fellowship: Program on Environment, The East-West Center for Cultural and Technical Exchange, Honolulu, Hawaii, \$9,000.
- 1993 *Award Recipient:* 21st Century Award from Nihon Keizai Shimbun, Inc. and the Global Industrial and Social Progress Research Institute: ¥5 m (\$45,000).
- 1992 - 1996 Center for Field Research (*Earthwatch*): \$94,000; "Solar and wind energy for Kenya." Additional local expertise research and training components were supported by: Green Cross International (1995), UNESCO (1994) to provide scholarships to African scholars and community activists working in the area of renewable energy and the environment, \$72,000.

AWARDS

- 2009 Chancellor’s Campus Sustainability Award (2009), Chancellor’s Advisory Committee on Sustainability, University of California, Berkeley
- 2007 Nobel Peace Prize awarded to the Intergovernmental Panel on Climate Change (Kammen is one of ~ 300 lead authors and 2,000 participants for the preparation of IPCC documents and reports)

- 2007 Distinguished Citizen Award. Category: Sustainable Energy, Commonwealth Club of California
- 2004 - 2009 Class of 1935 Distinguished Chair in Energy
- 2001 Aldo Leopold Environmental Leadership Fellowship (*Declined*).
- 2000 Development Marketplace Award Winner, the World Bank. "Low Cost UV Water Disinfection System for Household Use in Lesser-Developed Nations (Dr. Lloyd Connelly and D. M. Kammen).
WWW: <http://www.developmentmarketplace.org>
- 1996 – 1999 Class of 1934 Preceptor (Woodrow Wilson School)
- 1996 Bronze Medal (with Danielle A. Gordon) *Chicago Quantitative Alliance 1995 Academic Competition* for the paper, "Uncertainty and overconfidence in time series forecasts: application to the Standard & Poor's 500 stock index", *Applied Financial Economics*, **6 (3)**, 189 – 198 (1996).
- Awarded the ANBAR Management Intelligence Citation of Excellence (1997):
<http://www.anbar.co.uk/anbar/excellence/authors.htm>
- 1994 Fellow, American Physical Society (1994). Citation:
For his efforts to foster development with culturally appropriate renewable energy projects and to link local sustainable development with programs to mitigate global environmental degradation.
- 1993 *21st Century Earth Award*: for research addressing the amelioration or solution of such global environmental problems as climate change, deforestation or biodiversity preservation (\$45,000). Citation:
For research aimed at reducing greenhouse gas emissions and improving environmental health in developing nations: a proposal for energy management, cooking technology, and education.
- 1991 Teaching Award, Biology Undergraduate Student Curriculum Committee, California Institute of Technology.
- 1988 – 1991 Weizmann & Bantrell Postdoctoral Fellowship in the Division of Engineering and Applied Science (1988-89), Division of Biology (1989-91); California Institute of Technology.
- 1984 Cornell University A. B., *Cum Laude* (Physics).
- 1980 Westinghouse Science Talent Search: Honors Group.

EDITORIAL BOARDS

Scientific American, 2009 -
Journal of Renewable Energy Research and Development, 2009 -
Environmental Research Letters, Editor-in-Chief (& Founding Editor), 2006 -
Innovations, 2005 - .
East African Journal of Physical Sciences. 2005 - 2008
Annual Review of the Environment and Resources (2001 – 2005); Associate Editor, 2003 - 2006.
Chemosphere, Editor, Global Change Science and Policy Section, 1993 – 1999
Global Change Science (journal developed from *Chemosphere*), 1999 –2004

ADVISORY COMMITTEES

Board of Trustees, the Head-Royce School, 2009 -
Allocation and Economic Advisory Committee on Greenhouse Gas Emission Permits,
convened by California Governor Schwarzenegger, 2009 - 2010
Science Advisory Committee, Chabot Space and Science Center, Oakland CA, 2008 -
Advisory Committee, State of California, AB118, The Alternative and Renewable Fuel
and Vehicle Technology Program (2008 - 2009). Appointed by the California
Energy Commission and the California Air Resources Board.
Chair-Elect, American Association for the Advancement of Science (AAAS), Section on
Societal Impacts of Science and Engineering (2008 – 2009; Chair 2009 – 2011).
Member, American Physical Society Task-Force on Energy Efficiency (2007 - 08).
Advisory Board, Energy & Environment X PRIZE Foundation (2007 – 2009)
Member, Advisory Council, National Center for Atmospheric Research (NCAR), 2007 - .
Principal author and technical advisor, California State Ballot Initiative on clean energy,
“Proposition 87”, November 2006. Election result: failed 53%/47%
Member, Mayor Gavin Newsome’s (SF) Clean Technology Advisory Council, (2005 – 2007)
Faculty Reviewer, *The Triple Helix: The National Journal of Science, Society, and Law*
Member, Canadian National Advisory Panel on Sustainable Energy Science and Technology
Strategy, Appointed by the Minister of Natural Resources of Canada, 2005 – 6.
Program Committee, World Conference on Physics and Sustainability, Durban South Africa,
2005.
Union of Concerned Scientists, Scientific Advisory Board (2004 - 2009)
University of California Green Buildings/Clean Energy Steering Committee, 2003.
Elected At Large Member, Section on Societal Impacts of Science and Engineering (Section X),
American Association for the Advancement of Science (AAAS), 1998 – 2002.
Member of the Board, The Utility Reform Network (2001 - 2006)
California Energy Commission, Core Management Team, Public Interest Environmental
Research – Environmental Area (PIEREA), \$10,500,000 annual budget, 2000 – 2002.
Roster of Experts, Scientific and Technical Advisory Panel (STAP); Global Environment
Facility (GEF), 1995 - 2007
The Annapolis Center for Risk Analysis, 1995.
Team Leader, Evaluation of Energy, Environment, and Development Programme, Africa
Division, Swedish International Development Cooperation Agency (Sida), 1996 - 1997
U. S. Environmental Protection Agency (Climate Change Division)
Editorial Advisory Council, *African Technology Forum*, 1994 - 1996
U. S. Department of Energy: National Institute for Global Environmental Change, 1993 – 1995
Elected Member, The Council of Advisors: Energy Section (<http://www.thecouncils.com/>)

REFEREE

Journals:

Ambio, Appropriate Technology, Atmospheric Environment, Energy Policy, The Energy Journal, Energy - The International Journal, Environment, Environmental Health Perspectives, Environmental Research Letters, Environmental Science & Technology (EST), Global Biogeochemical Cycles, Global Change Science, Nature, Risk Analysis, Science, Scientific American, Solar Energy, Strategic Environmental Management, World Bank Research Observer, Whole Earth, World Development

Publishers:

Cambridge University Press, Island Press, McGraw Hill, MIT Press, Resources for the Future, UNDP, World Resources Institute, Yale University Press

Funding Agencies:

Compton Foundation, Earthwatch, GEF/UNDP, National Institute of Health, National Science Foundation, US AID, US EPA, US NIH, Winrock International Foundation, UK National Science and Technology Council.

PROFESSIONAL MANAGEMENT EXPERIENCE

- 2008 - Chair, Section on the Social Impacts of Science and Technology, American Association for the Advancement of Science (AAAS)
- 2008 - Director, Transportation Sustainability Research Center, University of California, Berkeley
- 2007 - Section Coordinator, Systems Science and Impacts, \$500,000,000 Energy Biosciences Institute (BP funding to the University of California, Lawrence Berkeley National Laboratory, and the University of Illinois at Urbana Champaign)
- 2006 Acting Chair, Energy and Resources Group
- 2005 - Co-Director, Berkeley Institute of the Environment
- 2004 - 2009 UC Berkeley/ITRI (Industrial Technology Research Institute, Republic of Taiwan): manager, with Prof. A. Majumdar, of \$500,000/year research program (tentative duration: 5 years, \$2,500,000).
- 2000 – 2001 Core Management Team (with E. Vine [LBL], J. Sharpless [former CEC Commissioner], J. Quinn [UC Davis], K. Birkinshaw [CEC]), California Energy Commission, Public Interest Environmental Research – Environmental Area (PIER-EA), \$10,500,000 annual program budget.
- 1999 - Founding Director, Renewable and Appropriate Energy Laboratory (UC Berkeley)

LANGUAGES & TECHNICAL SKILLS

Spanish (conversant), Swahili (conversant)

Private Pilot (PPL: Single Engine, Land)

Concert electrical wiring (*Grateful Dead*, Summer 1988)

Computer Programming: BASIC, C++, FORTRAN, PASCAL, STATA, MATLAB

REFERENCES (available on request)**UNIVERSITY SERVICE, RESEARCH AND PROGRAM ADMINISTRATION***At the University of California, Berkeley:*

- 2008 - 2009 Chair, Faculty Search Committee, “Energy systems analysis”, Energy and Resources Group. Hired: Duncan Callaway (and spouse Meredith Fowlie to Agricultural and Resource Economics).
- 2007 - 2008 Chair, Faculty Search Committee, “Managed Ecosystems”, Energy and Resources Group. Search did not result in a faculty hire
- 2007 - 2008 Member, Search Committee, “Dean of the Goldman School of Public Policy”, Recommendation to the Chancellor of two candidates for further consideration
- 2007 - 2006 Executive Committee, Energy Biosciences Institute (\$500 BP supported institute)
- 2005 – 2006 Chancellor’s Advisory Committee on Sustainability (CACS)
- 2005 - Executive Committee, CITRIS (Center for Information Technology Research in the Interest of Society)
- 2005 - Co-Chair, Berkeley Institute of the Environment
- 2003 - 2004 Regent’s Steering Committee, Clean Energy/Green Building Task Force
- 2002 - 2004 Executive Committee, Berkeley ‘Future of the Planet/Environmental Institute’ program.
- 2001 – 2003 Harry S. Truman Fellowship Selection Committee
- 2002 – 2003 Udall Fellowship Selection Committee, 2001 – 2003.
- 2002 Chair, Faculty Search Committee, “Science, Technology and Environmental Policy”, ERG Search.
- 2001 - 2002 Search Committee, Dean of the College of Natural Resources, Successful Recruitment of Professor Paul Ludden (University of Wisconsin, Madison)
- 2002 – 2004 Committee on Status of Women and Ethnic Minorities (SWEM)
- 2001 - 2002 Chair, Faculty Search Committee, “Environmental and Development Sociology”, Energy and Resources Group. Successful recruitment of Dr. Isha Ray
- 2002 – 2003 Search Committee Member, “Science, Technology and Environmental Policy”, joint search between ERG and the Goldman School of Public Policy (1999 – 2001)
- 1999 – 20004 Campus Representative - Advisory Committee of the University of California Energy Institute (UCEI)
- 1999 – 2003 Co-Chair, Curriculum Committee, Energy & Resources Group
- 1998 - Faculty Affiliate, African Studies Program
- 1998 - 2008 Faculty Affiliate, Center for Risk Analysis
- 1998 - 2005 Faculty Affiliate, Health, Environment and Development (HED) Program

At Princeton University:

- 1998 – 1999 Faculty Fellow, Princeton Society of Fellows
- 1996 – 1999 Labouisse Development Studies Fellowship Selection Committee/Chair
- 1997 – 1999 Chair, Science, Technology & Environmental Policy (STEP) Program
- 1993 – 1997 Co-Chair, Program on Science, Technology and Public Policy
- 1996 – 1997 Woodrow Wilson School Student-Faculty Diversity Committee

- 1996 – 1999 Associate Faculty, Princeton Environmental Institute
1994 – 1999 Faculty Fellow, Forbes College, Princeton University
1993 – 1994 Princeton Environmental Initiative, Planning committee
1993 Program Director, conference: "Polluted or Pristine? Scientific, cultural, and policy implications of pre-industrial anthropogenic impact on the global carbon cycle", hosted by the Program on Environment, East-West Center, Honolulu, Hawaii. September 17 - 19, 1993.
1993 – 1994 Woodrow Wilson School: Undergraduate Prize Committee
1993 – 1999 Woodrow Wilson School: Ph.D. Admissions Committee
1993 – 1999 Woodrow Wilson School Undergraduate Committee
1993 – 1999 Princeton University Committee on African Studies

At Harvard University:

- 1991 – 1993 Harvard University Committee on African Studies

INTERNATIONAL ORGANIZATIONS

- Association for Environmental Studies and Sciences, Member (2008 -)
- President Elect/President/Past-President of the Section of Societal Impacts of Science and Technology, American Association for the Advancement of Science (AAAS). Elected by vote to three year term (2008 – 201)
- Editor-in-Chief, *Environmental Research Letters* (2006 -).
- Advisor, Energy Sector, Asian Development Bank, 2000 - 2004
- Coordinating Lead-Author, Intergovernmental Panel on Climate Change (IPCC), Special Report on Technology Transfer (1998 - 2000)
- Global Environment Facility (GEF/UNDP), Scientific and Technical Review Panel, 1995 -
- Co-Chair (with Stephen Karekezi) Princeton-AFREPREN (African Energy Policy Research Network) Visiting Fellows Program for emerging scholars from developing nations.
- AAAS Member-at-Large, Section Committee on Societal Impacts of Science and Engineering, 1998 - 2002 (elected member).
- American Physical Society, 1983 - 1987, 1993 -
Elected to the Executive Committee: *Forum on Physics and Society*, 1995 - 1998
Nominating Committee, 1997 - 1998
- American Association of Geographers, 1992 - 1997
- American Wind Energy Association, 1994 -
- National Council, Federation of American Scientists, 1995 - 2000
- African Academy of Sciences, Elected Permanent Fellow, 1995

BUSINESS AND COMMERCIAL ENDEAVORS

- Technical and Strategic Advisor, Duke Energy, 2009 -
- Technical Advisor, MiaSole (solar thin film), 2009 -
- Scientific Advisory Board, The Eureka Fund (San Francisco, CA), 2009 –
- VP for Research, Enphase Energy (Petaluma, CA), 2008 –
- Consultant, Direct Carbon (San Francisco, CA), 2008 –
- Environmental Board of Advisors, Greenwala (San Francisco, CA), 2008 -
- Founding Partner, Renewable Energy Funding (Oakland, CA), 2008 -

- IMARA Energy Storage (Menlo Park, CA), 2009 –
- Board of Directors, Baseload Energy, 2008 –
- EDP Renewables (Electricite du Portugal, Renewables), Board of Directors, 2008 -
- Board of Advisors, Cumulus Climate Fund (2007 – 2008)

PUBLIC OUTREACH AND ACTIVISM

- *Scientific American*, Board of Advisors, 2009 -
- Scientific Advisory Board, Chabot Space and Science Center, 2009 -
- Advisory Board Member, Carbon Clear (UK Based carbon offset / environmental options group)
- Host of the Discovery Channel / Science Channel 7 part (7 hour) series, *Ecopolis*
- Chairman of the Advisory Panel, EcoEquity (<http://www.ecoequity.org>)
- Extensive public speaking, U. S. House and Senate Committee hearing testimonies, work with state and regional energy and environmental agencies. Appearances on *60 Minutes* (twice) *Nova*, *The NewsHour with Jim Lehrer*. For details, see: <http://rael.berkeley.edu>
- Appeared in the PBS TV series *e²: the economics of being environmentally conscious*, hosted by Morgan Freeman, (<http://www.pbs.org/e2/>). First aired December 2007
- Appeared in the *Fred Friendly* PBS Series *Nanotechnology: The Power of Small*
- Served as the technology judge in the Discovery Channel five-part series, *Ecopolis*. First aired November, 2008.

BOOKS / CHAPTERS & EDITED VOLUMES

In preparation:

Energy Farmers: An exploration of old and new modes of thinking about, and managing energy resources (Princeton University Press)

The Road to Celebration: Adventures in Energy and Development in route to Sandinista Nicaragua. Unpublished Manuscript.

In print (9):

- 2010 Cruetzig, F. S. and Kammen, D. M. (2010) “Getting the carbon out of transportation fuels”, in *Global Sustainability: A Nobel Cause*, Schellenhuber, H.-J., Molina, M., Stern, N., Huber, V., and Kadner, S. (eds). (Cambridge University Press: Cambridge, UK), 307 – 318.
- 2009 Pinho, Manuel, *et al.* (2009) *A New Energy Era: Renewable Energy in Portugal* “Building and enabling a low-carbon economic recovery: collaborative options for the United States, Portugal, and the European Union” (Ministério da Economia e da Inovação: Lisbon, Portugal).
- 2003 Kammen, D. M., Bailis, R. and Herzog, A. V. (2003) *Clean Energy for Development and Economic Growth: Biomass and Other Renewable Energy Options to Meet Energy and Development Needs in Poor Nations* (UNDP: New York).

- 2003 Fayemi, A. and Kammen, D. M. (2003) *African Women: A Photo Essay of the Lifeblood of a Continent* (Ebenezer press: White Plains, NY).
- 2002 Climate Technology Initiative, Contributing Author (2002) *Technology Without Borders: Case Studies of Successful Technology Transfer* (International Energy Agency: Paris, France).
URL: <http://www.iea.org/public/studies/cti.htm>
- 2000 Intergovernmental Panel on Climate Change Working Groups II and III (2000) *Methodological and Technological Issues in Technology Transfer* (Cambridge University Press: New York, Cambridge UK and New York, NY). Coordinating Lead Author. ISBN 0-521-80494-9.
- 1999 Kammen, D. M. and Hassenzahl, D. M. *Should We Risk It? Exploring Environmental, Health and Technological Problem Solving*, in press, Princeton University Press. ISBN 0-169-00426-9, 406 pages, 77 tables, 82 illustrations.
WWW: <http://socrates.berkeley.edu/~dkammen/#book>
• Book Club Selection: *Library of Science*. Reviewed in *Science*, *Risk Analysis*, *Scientific American*, *WholeEarth*.
- 1996 Nditu, M. and Kammen, D. M. *Solar Cookbook: Less Wood, Less Smoke, Better Health* (Academy Science Publishers: Nairobi, Kenya). ISBN 9966-831-32-0.
1996. Kiswahili version of *Solar Cookbook*. *Kitabu cha Upishi Ukitumia Kawi ya Jua*. ISBN 9966-831-33-9.
- 1994 Kammen, D. M., Smith, K. R., Rambo, A. T. and Khalil, M. A. K (editors) Preindustrial Human Environmental Impacts: Are there Lessons for Global Change Science and Policy? *Chemosphere* (Pergamon Press: Oxford UK), **Vol. 29 (5)**, 317 pages.

JOURNAL PUBLICATIONS, BOOK CHAPTERS & ARTICLES

NOTE: MOST OF THE ARTICLES LISTED BELOW ARE AVAILABLE IN PDF FORMAT FROM:
<http://rael.berkeley.edu/papers>

NOTE ON AUTHOR ORDER: FOR ALL PUBLICATIONS I GENERALLY USE 'PHYSICS CONVENTION' FOR AUTHOR ORDERING ON COLLABORATIVE PAPERS: STUDENTS FIRST, PRINCIPAL INVESTIGATOR / RESEARCH DIRECTOR IN THE LAST POSITION.

NOTE: • = REFEREED / PEER-REVIEWED PUBLICATIONS (145 OF 237 TOTAL)

2010

- ppp. • Lemoine, D. M., Fuss, S., Szolgayova, J., Obersteiner, M., and Kammen, D. M. (2010) “Greenhouse gas policy portfolios depend on beliefs about climate sensitivity and negative emission technologies.”
- aaa. • Creutzig, F., Thomas’ A., Kammen’ D. M., and Deakin, E. (2009) “Multi-dimensional Benefits of a City Toll in Chinese Cities: Potentials, Barriers and the Need for Responsible Institutions”, *in review*.
- zzz. • Pepe, S., Norwood, Z., Romanin, V., and Kammen, D. M. (2009) “Performance-Cost Analysis of Solar Combined Heat and Power Systems”, *J. Heat and Power*, submitted.
- ccc. • Jonathan Koomey, Marilyn Brown, Richard Brown, Chris Calwell, Ralph Cavanagh, Rick Diamond, Joseph H. Eto, Ashok Gadgil, Howard Geller, José Goldemberg, Chuck Goldman, David Goldstein, Steve Greenberg, Holmes Hummel, Dan Kammen, Skip Laitner, Mark Levine, Amory Lovins, Gil Masters, Jim McMahon, Alan Meier, Evan Mills, Steve Nadel, Bruce Nordman, Lynn Price, Marc Ross, Jayant Sathaye, James Sweeney, Diana Vorsatz, John Wilson, and Ernst Worrell (2009) “Defining A Standard Metric For Electricity Savings,” *Environmental Research Letters*, **5**, 1 – 10. doi:10.1088/1748-9326/5/1/014017
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235. • Hertel, T., Golub, A., Jones, A. D., O’Hare, M., Plevin, R. J., and Kammen, D. M. (2009) “Effects of Maize ethanol on global land use and greenhouse gas emissions: Estimating market mediated responses”, *BioScience*, **60 (3)**, 223 – 231.
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<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/05/18/IN3R10MGSK.DTL&hw=The+low+carbon+diet&sn=001&sc=1000>
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 203. • Colella, W. G., Schneider, S. H., Kammen, D. M., Jhunjhwala, A. and Teo, N. (2008) "Part II of II: Deployment of *MERESS* Model -- Designing, Controlling, and Installing Stationary Combined Heat and Power (CHP) fuel Cell Systems (FCS) to Reduce Costs and Greenhouse Gas (GHG) Emissions, *Proceedings of the 6th International Fuel Cell Science, Engineering & Technology Conference*, June 16- 18, Denver, CO.
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193. • Kuriyan, R., Ray, I., and Kammen, D. M. (2008) *Issues in Science & Technology*, “How to use technology to spur development,” *Winter*, 70 - 74.

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Kammen, D. M. (2009) Testimony on "Climate Change and the Business Climate", California Assembly, Hearing, Assembly member Nancy Skinner, Chair, December 8, 2009.

Kammen, D. M. (2009) Testimony "Clean energy options for Native American Tribes", U. S. Senate Committee. Field hearing (Denver, CO): Senator Byron Dorgan (D-ND), September 14, 2009.

Kammen, D. M. (2008) Testimony on "Availability of Fuel or Other Energy Sources for Transportation," California Assembly Transportation Committee, Assembly member Mark Desaunier (D), Chair, October 31, 2008.

Kammen, D. M. (2008) Testimony on "Investing in the Future: R&D Needs to Meet America's Energy and Climate Challenges," U. S. House of Representatives Select Committee on Energy Independence and Climate Change, September 10, 2008. Congressman Edward Markey (D-MA), Chair.

Kammen, D. M. (2008) AB 1709 Subcommittee Hearing, Municipal Clean Energy Financing Districts, sponsored by Assemblywoman Loni Hancock, June 25 (committee approval 6 - 2; Signed into law by Governor Schwarzenegger, July 24, 2008).

Kammen, D. M. (2008) SB 1484, Clean energy research and development tax credits, sponsored by State Senator Elaine Alquist, June 25, 2008.

Kammen, D. M. (2008) Green Innovations for a Clean California: A Community and Workforce Development Symposium/Hearing sponsored by Assemblywoman Mary Hayashi, April 11 (Livermore, CA).

Kammen, D. M. (2007) Testimony on "Emerging Green Technology and Economic Growth - Can California Remain Competitive?" California State Senate Select Committee Emerging Technologies and Economic Competitiveness, November 13, 2007. Senator Elaine Alquist, Chair.

Kammen, D. M. (2007) Testimony on "Opportunities for greenhouse gas reductions and the US EPA Permitting Process" U. S. House of Representatives Committee on Oversight and Government Reform, November 8, 2007. Congressman Henry Waxman (D-CA), Chair.

- Kammen, D. M. (2007) Testimony on “Green Jobs Created by Global Warming Initiatives”, United States Senate Committee on Environment and Public Works, September 25, 2007. Senator Barbara Boxer (D-CA), Chair.
- Kammen, D. M. (2007) “A ten year outlook for energy”, United States House of Representatives Committee on Appropriations, Subcommittee on Energy and Water, February 28, 2007. Congressman Peter Visclosky (D-IN), Chair.
- Kammen, D. M. (2006) Senate Briefing on energy, decarbonization, and climate change, Senators Feinstein and Jeffords, co-chairs, hosted by the Senate Environment and Public Works Committee, September 21, 2006.
- Kammen, D. M. (2006) Testimony at U. S. House of Representatives Committee on Government Reform, “Climate Change Technology Research: Do We Need a ‘Manhattan Project’ for the Environment?” Representative Tom Davis (R-VA) Chair, Henry Waxman, Ranking Minority Member (D-CA), September 21, Washington, D. C.
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- Kammen, D. M. (2006) Testimony at U. S. House of Representatives Science Committee, Subcommittee on Energy, Representative Judy Biggert (D-CA) Chair, September 20, Washington, D. C., “The Department of Energy's Plan for Climate Change Technology Programs”
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- Kammen, D. M. (2006) Comments at the U. S. Senate Renewable Energy Roundtable, “Renewable Energy Opportunities for Climate Change”, Senator Jeffords (D-VT) and Inhofe (R-OK), Chairs, May 25, Washington, D. C.
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- Kammen, D. M. (2006) Testimony before the California Senate Hearing on Environmental Quality, “Biofuel Options”, Tuesday, May 24, Sacramento. CA Senator Christine Hayhoe, Chair.
- Kammen, D. M. (2006) Testimony before the California Select Committee on Air and Water Quality, “Biofuel Options”, Tuesday, March 21, Sacramento. CA Assemblywoman Fran Pavley, Chair.
- Kammen, D. M. (2006) Testimony before the California Select Committee on Air and Water Quality, “The Climate Change Crisis ... Can California Create a Way Out? Feasible Solutions”, Friday, March 10 (Santa Rosa Junior College). CA Assemblyman Joe Nation, Chair.
- Kammen, D. M. (2006) Testimony before the California Select Committee on Air and Water Quality, “The Climate Change Crisis ... Can California Create a Way Out? Feasible Solutions”, Friday, March 10 (Dominican University, San Rafael, CA). CA Assemblyman Joe Nation, Chair.

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36. McNish, T., Kammen, D. M. and Gutierrez, B. (2010) *Clean Energy Options for Sabah* (Sabah Unite to Re-Power the Future & World Wide Fund for Nature, WWF-Malaysia).
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16. Timothy Lipman, Ryan Ramos, and Daniel Kammen (2005) PIER Wind-H₂ study.
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12. Bradford, P. A. *et al.*, (2003) National Energy Policy Report (National Energy Policy Institute & the Consensus Building Institute: Snowmass, CO and Cambridge, MA).
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WWW: http://socrates.berkeley.edu/~rael/RAEL_UNDP_Biomass_CDM.pdf
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4. • Kammen, D. M., Wahhaj, H. and Yiadom, M. A. (1999) *Broad-Search Annotated Bibliography on Acute Respiratory Infections (ARI) and Indoor Air Pollution With an Emphasis on Children Under Five in Developing Countries* (Washington, DC: Environmental Health Project, US AID), 165 pp.
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SELECTED LONGER FEATURE MULTIMEDIA, VIDEO, & AUDIO

13. The PBS News Hour with Jim Lehrer. Spencer Michaels reporting, “The grid”, June 9, 2009
<http://www.pbs.org/newshour/video/share.html?s=news01s2961q9c3>
13. “Ecopolis” a five-part series on the Discovery Channel (air date: December 2008). Darlow-Smithson Productions (London, UK). Kammen is the host/energy czar of the show.
<http://science.discovery.com/tv/ecopolis/ecopolis.html>
12. “Powered by coal”, *60 Minutes*, interview with Scott Pelley, April 23, 2009.
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10. “Heat”, *Frontline*, interview with Martin Smith, October 21, 2008
<http://www.pbs.org/wgbh/pages/frontline/heat/>
9. “The UV Tube”, *Beyond Tomorrow*, April X, 2006 (Australian TV).
8. E2: Economics and the Environment (Autodesk), narrated by Morgan Freeman
7. “The ethanol solution”, *60 Minutes*, interview with Dan Rather, May 7, 2006.
<http://www.cbsnews.com/stories/2006/05/04/60minutes/main1588659.shtml>
6. “There goes the sun: Will we squander our clean-energy future” (2000) D. M. Kammen interview in *World Rivers Review*, June, 8 – 9, 14 – 15.
5. “Investing in future energy sources” (2000) D. M. Kammen interview in *Environmental Review*, **7 (3)**, 8 – 14.
<http://www.igc.apc.org/envreview>.
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Available as streaming video: <http://gm.kqed.org/4/14/>

3. Press Release (April 9, 2000) *Study finds that small size a-Si modules perform well in field*
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<http://www.kqed.org/tv/productions/greenmeans/gm2descriptions.html>
1. Tunbridge, L. and Kammen, D. M. (1993) "Solar ovens and deforestation in Kenya"
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INVITED TALKS AND PRESENTATIONS (partial listing of past four years only)

2008

- “Deep cuts in carbon emissions”, American Physical Society, Berkeley, CA (3/1/08)
- Invited presentation to the United Nations Environment Programme Ministerial Meeting, “Green jobs in a low-carbon economy”, UNEP Ministerial Special Event, Grimaldi Forum (2/22/08). Achim Steiner, UNEP Director General, presiding, Monte Carlo, Principality of Monaco
- American Association for the Advancement of Science (AAAS), Annual Meeting, “Biofuels: prospects and challenges in a carbon constrained world”, (2/15/08), Boston, MA
- Opening plenary talk for the annual meeting of *Engineers without Borders*, “Science and policy for a low-carbon future”, San Francisco, CA (2/8/08)
- Energy and environmental solutions for a carbon constrained planet” *Focus the Nation*, University of California, Berkeley, CA (1/31/08)
- President’s Seminar, California Air Resources Board, “Science and policy for deep cuts in carbon emissions”, California Environmental Protection Agency, Sacramento, CA (1/29/08).
- Informal lecture and Q&A, “Barack Obama and the Energy and Environmental Imperative for the Next Presidency”, Berkeley, California (1/27/08). URL: <http://www.youtube.XXX>
- “One School’s transition to sustainability”, Council on Independent Schools of Northern California, San Francisco, CA (1/26/08)
- “Energy and environmental issues in the race for the presidency”, Boalt Law School (1/25/08)
- “Local solutions to climate change”, National Council on Science and the Environment, Annual Meeting (NCSE08), Washington, DC (1/18/08)
- “Climate solutions for a global society”, Rome Festival of Science, Rome, Italy (1/16/08)
- “Presentation on energy and water sustainability for public agencies”, Santa Rosa Water District Headquarters, Santa Rosa, CA(1/3/08)

2007

- World Bank Roundtable on Sustainable Energy, “Biofuels and local science and policy issues”, Washington, DC (1/27/07)
- “Wonderfest 2007” Have We Passed the Tipping Point on Climate Change?

- <http://www.wonderfest.org/> (10/28/07)
 - “Renewable energy options – the 2050 Agenda”, OECD 2050, Montreal, Canada (10/25/07)
 - “The biofuel revolution – science and policy challenges for sustainability”, National Academy of Sciences, DC (10/17/07)
 - “The future of Nuclear power”, National Building Museum”, (10/22/07)
 - “Energy and health”, Cal Homecoming, Berkeley, CA (10/4/07)
 - “Sustainable biofuels”, A Nobel Cause – Potsdam Symposium on Climate Change, Potsdam, Germany (10/9/07)
 - “Energy innovation”, San Francisco Business Journal Breakfast, San Francisco, CA (10/9/07)
 - “Energy security” The Pioneer Club, New York City, Cal in New York (9/26/07)
 - “How many jobs will the clean energy economy produce?” U. S. Senate Committee on Environment and Public Works, Senator Boxer, Chair, Washington, DC (9/25/07)
 - “Mayor Dellums – Sustainability Summit”, Oakland City Hall, Oakland, CA”, (9/20/07)
 - “Energy choices – voting for the environment”, League of Women Voters, Berkeley, CA(8/23/07)
 - “Energy innovation”, Climate Law Conference, San Francisco, CA (8/23/07)
 - “The green curriculum”, Head Royce School, Oakland, CA (8/23/07)
 - “The third industrial revolution”, Ministry of Economics, Lisbon, Portugal”, (7/30/07)
 - “Developing a clean energy economy”, National Academy of Science, Washington, DC (6/14/07)
 - “Energy innovation”, Pacific Economic Summit, Vancouver, Canada, (5/31/07)
 - “Energy innovation”, National Venture Capital Meeting, Washington, DC, (4/17/07)
 - “Our energy future”, Mathematical Sciences Research Institute, San Francisco, CA, (4/11/07)
 - “Energy innovation”, Clean Energy Investor Summit, San Francisco, CA, (4/3/07)
 - “Energy Farmers”, The Martin Lectures, The Martin Institute for Science and Society, Oxford University, Oxford, UK (3/5 - 7/07)
 - “Biofuels and sustainability”, California Club of London, London, UK, (3/5/07)
 - “Clean energy markets”, AAAS, San Francisco, CA, (5/31/07)
 - “Energy innovation”, U. S. House Committee on Appropriations, (2/28/07)
 - “Energy innovation – Biofuels at Cal”, Science Cafe, San Francisco, CA (1/25/07)
- 2006 • “After Oil, Then What?”, Cal Day/Earth Day (4/2/06)
- 2004 • “Energy and Environment in the 21st Century”, Cal Homecoming (10/15/04)
- “Fueling the Future: The Cost of Oil Dependence and the Prospect for Alternatives”, Discover Cal in Southern California (11/9&10/04)
 - “Business unusual: emerging clean energy markets” National Renewable Energy Laboratory Analytic Methods/DC Seminar Series (9/20/04)
 - “The People Speak” Presidential Forum on Energy and the Environment, Sponsored by the University of California at Los Angeles (10/1/04)
 - “The great energy efficiency debate”, Alliance to Save Energy (6/8/04)

- 2003
- “Emerging clean energy markets”, Institute for International Studies, Stanford University, January 30.
 - “Energy Infrastructure for Clean Development”, GreenPenn Conference, University of Pennsylvania, February 28.
 - “The 9/11 Energy Wake Up Call”, Council of Math/Science Educators for san Mateo County, Math and Science Spring Conference, March 1.
 - “Energy, Risk, and the Environment”, College of Engineering, Berkeley in Silicon Valley, March 1.
- http://www.coe.berkeley.edu/alumni_friends/bisv/index.html#Presentations.
- Hearing Testimony, U. S. Senate Committee on Commerce, Science and Transportation, “The Future of Nuclear Energy Science and Engineering, 6/10/03.
- 2002
- Ezzati, M. and D. M. Kammen (2002) "Indoor Air Pollution from Biomass Combustion as a Risk Factor for Acute Respiratory Infections in Kenya" The Proceedings of Indoor Air 2002: the 9th International Conference on Indoor Air Quality and Climate; Monterey, CA, July 2002, 4, 970-975
 - Hearing Testimony, U. S. House Committee on Commerce, Science, Subcommittee on Energy, ‘The Renewable Energy Roadmap’, 2/21/02
 - Bailis, R., M. Ezzati and D. M. Kammen (2002) "An Estimate of Greenhouse Gas Emissions from Common Kenyan Cookstoves under Conditions of Actual Use" The Proceedings of Indoor Air 2002: the 9th International Conference on Indoor Air Quality and Climate; Monterey, CA, July 2002, 2, 225-230
- 2001
- ‘Energy and Development’, Yale University School of Forestry and the Environment (1/20/01)
 - ‘Re-defining development’, J. F. Kennedy School of Government, Harvard University (4/16/01)
 - Hearing Testimony, U. S. Senate Committee on Commerce, Science and Transportation (7/10/01)
 - Hearing Testimony, U. S. Senate Committee on Finance (7/11/01)
 - ‘Energy R&D and Innovation’, CALPIRG Economists Summit on Energy, State Capital, Sacramento, CA (9/5/01).
- 2000
- UNDP/World Bank Experts Meeting on Making a Difference in Emerging Photovoltaic Markets, Marrakech, Morocco (9/25-28/00).
 - Energy Options for Development, Addis Ababa University, Ethiopia (6/28/00)
 - New Challenges in Tropical Medicine, Oxford, UK (9/20/00)
 - Human Dimensions of Climate Change Meeting, Carnegie Mellon University (7/19/00)
 - Health Impacts of Indoor Air Pollution and Household Energy Use in Developing Countries, Washington, DC (5/3-4/00)
- 1999
- International Energy Division, Lawrence Berkeley Laboratory
 - Center for International Studies, Stanford University
 - Stanford Linear Accelerator Center (SLAC)
 - Department of Engineering and Public Policy, Carnegie Mellon University
 - The World Bank, Washington, DC
 - Columbia University: School of Engineering
 - Tata Energy Research Institute, New Delhi, India

- Energy and Resources Group, University of California, Berkeley

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