

CV (updated through November 2019)

DR. JOHN P. HOLDREN

Addresses

Belfer Center for Science and International Affairs
Harvard Kennedy School of Government
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Falmouth, MA 02540
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Focuses of professional activity (chronological order)

aerospace engineering, theoretical plasma physics / space physics, fusion and fission energy technology, energy-technology assessment, energy policy, causes and consequences of global environmental change, climate science and policy, sustainable development, nuclear arms control and nonproliferation, international cooperation in science and technology, theory and practice of science and technology policy

Employment

Harvard University

John F. Kennedy School of Government:

Teresa and John Heinz Professor of Environmental Policy (7/96-1/09, 2/17--)

Co-Director, Program on Science, Technology, and Public Policy, Belfer Center for Science and International Affairs (2/17--)

Director, Program on Science, Technology, and Public Policy (07/96-01/09)

Faculty of Arts and Sciences, Department of Earth and Planetary Sciences

Professor of Environmental Science and Public Policy (7/96-1/09, 2/17--)

Faculty of Arts and Sciences, Environmental Science and Public Policy Major:

Member of the Board of Tutors (9/96-9/07)

Paulson School of Engineering and Applied Science: Affiliated Faculty Member (11/17--)

Executive Office of the President of the United States

Assistant to the President for Science and Technology (1/09-1/17)

Co-Chair, President's Council of Advisors on Science and Technology (1/09-1/17)

Director, Office of Science and Technology Policy (Senate-confirmed, 3/09-1/17)

Chair, National Science and Technology Council (3/09-1/17)

Co-Chair, National Ocean Council, (7/10-1/17)

Co-Chair, Interagency Council on Climate-Change Preparedness and Resilience (9/13-1/17)

Chair, Arctic Executive Steering Committee (1/15-1/17)

Member, Domestic Policy Council (3/09-1/17)

Member, National Economic Council (3/09-1/17)

Member, White House Council on Women and Girls (3-09-1/17)

Member, White House Council on Native American Affairs (3-09-1/17)

Woods Hole Research Center

President and Director (06/05-01/09)

University of California, Berkeley

Professor of Energy and Resources Emeritus (7/96--)

Class of 1935 Professor of Energy (8/91-6/96)

Professor of Engineering (by courtesy, 7/78-6/96))

Professor of Energy and Resources (7/78-6/96)

Chair of Graduate Advisors, Energy and Resources Group (1988-96)

Vice Chair, Energy and Resources Group (1983-96, on leave 1987-88)

Acting Chair, Energy and Resources Group (1982-83, Fall 1990)

Associate Professor of Energy and Resources (7/75-6/78)

Assistant Professor of Energy and Resources (7/73-6/75)

California Institute of Technology

Senior Research Fellow, Division of Humanities & Social Sciences and Environmental Quality Laboratory (1/72-9/73)

Lawrence Livermore National Laboratory

Physicist, Theory Group, Magnetic Fusion Energy Division (7/70-6/73, on leave 1/72-6/73)

Stanford University: Research Assistant, Institute for Plasma Research (7/69-6/70)

Lockheed Missiles and Space Company, Sunnyvale, California

Consultant in Re-Entry Physics (9/66-6/67)

Senior Associate Engineer, Re-Entry Aerodynamics (Summer 1966)

Associate Engineer, Performance Analysis (Summer 1965)

Concurrent and Visiting Appointments

Tsinghua University: Guest Professor in the School of Policy and Management (3/08-1/09); Distinguished Visiting Professor (campus-wide, 6/18--)

Woods Hole Research Center (Woods Hole, Massachusetts): Visiting Scholar (1/92-7/92, 5/93-5/94); Distinguished Visiting Scientist (5/94-6/05), Vice Chair of the Board of Trustees (5/94-6/05); Senior Advisor to the Director (02-17--)

University of Rome Tor Vergata: Visiting Professor of Physics (Fall 1987)

Max Planck Institute for Social Sciences, Starnberg, Germany: Visiting Scientist (Fall 1987)

Lawrence Livermore National Laboratory: Faculty Consultant, Magnetic Fusion Energy, Energy, and Laser and Environmental Directorates (11/73-7/94); Visiting Physicist, Theory Group, Magnetic Fusion Energy Division (Fall 1986).

American Academy of Arts and Sciences: Kistiakowsky Visiting Scholar 1983-84

East-West Center (Honolulu, HI): Visiting Senior Scientist in Energy and Environment (Fall 1980)

Education

Ph.D. (6/70), **Stanford University**, Department of Aeronautics & Astronautics and Institute for Plasma Research (Dissertation: "Collisionless Stability of an Inhomogeneous, Confined, Planar Plasma")

S.M. (6/66), **Massachusetts Institute of Technology**, Department of Aeronautics and Astronautics (Dissertation: "Landau Damping of Plasma Oscillations in a Uniform External Magnetic Field")

S.B. (6/65), **Massachusetts Institute of Technology**, Department of Aeronautics and Astronautics

Publications

Co-authored books and book-length reports (inverse chronological order)

Confronting Climate Change: Avoiding the Unmanageable and Managing the Unavoidable, Scientific Expert Group on Climate Change & Sustainable Development (Coordinating Lead Authors R Bierbaum, J Holdren, M MacCracken, R Moss, & P Raven), Report to the UN Commission on Sustainable Development, United Nations Foundation and Sigma Xi, February 2007, 144 pp.

Monitoring Nuclear Weapons and Nuclear-Explosive Materials: An Assessment of Methods and Capabilities, Committee on International Security and Arms Control (John P. Holdren, Committee Chair, William F. Burns, Study Co-Chair, Steven Fetter, Study Co-Chair, Spurgeon M. Keeny, Study Editor-in-Chief, and 12 others), National Academy of Sciences (Washington, DC), April 2005, 264 pp.

Ending the Energy Stalemate: A Bipartisan Strategy to Meet America's Energy Challenges, National Commission on Energy Policy (John P. Holdren, Co-chair, William K. Reilly, Co-chair, John W. Rowe, Co-chair, Philip R. Sharp, Congressional Chair, Jason Grumet, Executive Director, and 12 others (NCEP, Washington DC), December 2004, 128 pp.

Controlling Nuclear Warheads and Materials: A Report Card and Action Plan, Matthew Bunn, Anthony Wier, and John P. Holdren, Project on Managing the Atom, Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University, for the Nuclear Threat Initiative (NTI, Washington, DC), March 2003, 231 pp.

Technical Issues Related to the Comprehensive Test Ban Treaty, Committee on Technical Issues Related to Ratification of the Comprehensive Test Ban Treaty (John P. Holdren, Chair, and 10 others), National Academy of Sciences (National Academy Press, Washington, DC), June 2002, 84 pp.

Securing Nuclear Weapons and Materials: Seven Steps for Immediate Action, Matthew Bunn, John P. Holdren, and Anthony Wier, Project on Managing the Atom, Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University, and the Nuclear Threat Initiative, May 2002, 78 pp.

Interim Storage of Spent Nuclear Fuel, Matthew Bunn, John P. Holdren, Allison Macfarlane, Susan E. Pickett, Atsuyuki Suzuki, Tatsujiro Suzuki, and Jennifer Weeks, Harvard University Project on Managing the Atom and University of Tokyo Project on Sociotechnics of Nuclear Energy, June 2001, 124 pp.

Powerful Partnerships: The Federal Role in International Cooperation on Energy Innovation, Panel on International Cooperation in Energy Research, Development, Demonstration, and Deployment (John P. Holdren, Chair, Samuel F. Baldwin, Study Executive Director, and 13 others), President's Committee of Advisors on Science and Technology (Executive Office of the President of the United States, Washington, DC), 1999, circa 300 pp.

Federal Energy Research and Development for the Challenges of the Twenty-First Century, Energy Research and Development Panel (John P. Holdren, Chair, Samuel F. Baldwin, Study Executive Director, and 20 others), President's Committee of Advisors on Science and Technology (Executive Office of the President of the United States, Washington, DC), 1997, circa 250 pp.

The Future of U.S. Nuclear Weapons Policy, Committee on International Security and Arms Control (John P. Holdren, Chair, William F. Burns, Study Chair, Jo L. Husbands, Staff Director, and 14 others), National Academy of Sciences (National Academy Press, Washington, DC), 1997, 100 pp.

Reactor-Related Options for the Disposition of Excess Weapons Plutonium, Panel on Reactor-Related Options (John P. Holdren, Chair, Matthew Bunn, Study Executive Director, and 6 others), Committee on International Security and Arms Control, National Academy of Sciences (National Academy Press, Washington, DC), 1995, 418 pp.

Management and Disposition of Excess Weapons Plutonium, Committee on International Security and Arms Control (John P. Holdren, Chair, Wolfgang K.H. Panofsky, Study Chair, Matthew Bunn, Study Executive Director, and 17 others), National Academy of Sciences (National Academy Press, Washington, DC), 1994, 275 pp.

Report of the Senior Advisory Committee to the Department of Energy on Environmental, Safety, and Economic Aspects of Magnetic Fusion Energy, John P. Holdren, Chair, and 9 others, Lawrence Livermore National Laboratory UCRL-53766 (National Technical Information Service, Springfield, VA), 1989, 345 pp.

Energy in Transition 1985-2010, Committee on Nuclear and Alternative Energy Systems (Harvey Brooks and Edward Ginzton, Co-Chairs, and 14 others), National Research Council (W.H. Freeman, San Francisco), 1980, 677 pp.

Ecoscience: Population, Resources, Environment, Paul R. Ehrlich, Anne H. Ehrlich, and John P. Holdren (W.H. Freeman, San Francisco), 1977, 1051 pp.

Fusion and Fast Breeder Reactors, W. Haefele, J. Holdren, G. Kessler, and G. Kulcinski, with contributions by A. Belostotsky, R. Grigoriants, D. Kurbatov, G. Shatalov, M. Styrikovich, and N. Vasiliev (International Institute for Applied Systems Analysis, Vienna, 1977), 506 pp.

Human Ecology: Problems and Solutions, Paul R. Ehrlich, Anne H. Ehrlich, and John P. Holdren (W.H. Freeman, San Francisco), 1973, 304 pp. German edition: **Humanökologie** (Springer Verlag, Berlin/Heidelberg), 1975, 234 pp.

Energy: A Crisis in Power, John Holdren and Phil Herrera [separately authored halves of the book] (Sierra Club Books, New York), 1971, 252 pp. Japanese edition, Blue Backs, Tokyo, 1977.

Books co-edited

Conversion of Military R&D Judith Reppy, Vsevolod Avduyevsky, John Holdren, and Joseph Rotblat, eds. (MacMillan) 1998, 296 pp

- Building Global Security through Cooperation**, J. Rotblat and J. P. Holdren, eds. (Springer-Verlag), 1990, 301 pp
- The Cassandra Conference: Resources and the Human Predicament**, P. R. Ehrlich and J. P. Holdren, eds. (Texas A&M University Press), 1988, 330 pp
- Strategic Defences and the Future of the Arms Race**, John P. Holdren and Joseph Rotblat, eds. (MacMillan), 1987, 286 pp
- Earth and the Human Future**, Kirk R. Smith, Fereidun Fesharaki, & John P. Holdren, eds. (Westview), 1986, 258 pp
- Population: Perspective 1973**, Harrison Brown, John Holdren, Alan Sweezy, and Barbara West, eds. (Freeman-Cooper), 1974, 284 pp
- Man and the Ecosphere**, Paul R. Ehrlich, John P. Holdren, and Richard W. Holm, eds. (W.H. Freeman), 1971, 307 pp
- Global Ecology**, John P. Holdren & Paul R. Ehrlich, eds. (Harcourt), 1971, 292 pp.

Reports by President Obama's Council of Advisors on Science and Technology (J. Holdren, Co-Chair)

- Ensuring U.S. Leadership in Semiconductor Innovation & Manufacturing**, 32 pp, January 2017
- Preparing for Intentional Biological Threats**, 18 pp, November 2016
- Forensic Science in the Criminal Courts**, 174 pp, September 2016
- Independence, Technology, and Connection in Older Age**, 66 pp, March 2016
- Technology and the Future of Cities**, 84 pp, February 2016
- Private Sector Efforts in Adaptation to Climate Change** (Letter Report), 8 pp, November 2015
- Hearing Technologies** (Letter Report), 15 pp, October 2015
- Ensuring Leadership in Federally Funded Research and Development in Information Technology**, 68 pp, August 2015
- Accelerating U.S. Advanced Manufacturing**, 108 pp, October 2014
- Fifth Assessment of the National Nanotechnology Initiative**, 88 pp, October 2014
- Information Technology for Targeting Job-Skills Training and Matching Talent to Jobs** (Letter Report), 14 pp, September 2014
- Combating Antibiotic Resistance**, 65 pp, September 2014
- Better Health Care and Lower Costs: Accelerating Improvement through Systems Engineering**, 66 pp, May 2014
- Big Data and Privacy: A Technological Perspective**, 57 pp, May 2014
- Technology in Higher Education: Massive Open Online Courses** (Letter Report), 9 pp, December 2013
- Immediate Opportunities for Strengthening the Nation's Cybersecurity**, 31 pp, November 2013
- Addressing Climate Change in the Second Term** (Letter Report), 9 pp, March 2013
- Designing a Digital Future: Federally Funded Research and Development in Networking and Information Technology**, 60 pp, January 2013
- Agricultural Preparedness & the United States Agricultural Research Enterprise**, 72 pp, December 2012
- Transformation and Opportunity: The Future of the U.S. Research Enterprise**, 124 pp, November 2012
- Propelling Innovation in Drug Discovery, Development, and Evaluation**, 110 pp, September 2012
- Realizing the Full Potential of Government-Held Spectrum to Spur Economic Growth**, 192 pp, July 2012
- Capturing Domestic Competitive Advantage in Advanced Manufacturing**, 70 pp, July 2012

Fourth Assessment of the National Nanotechnology Initiative, 64 pp, April 2012

Engage to Excel: Producing One Million Additional College Graduates with Degrees in Science, Technology, Engineering, and Mathematics, 130 pp, February 2012

Sustaining Environmental Capital: Protecting Society and the Economy, 145 pp, July 2011

Ensuring American Leadership in Advanced Manufacturing, 56 pp, June 2011

Designing a Digital Future: Federally Funded Research and Development Networking and Information Technology, 148 pp, December 2010

Realizing the Full Potential of Health Information Technology to Improve Healthcare for Americans: The Path Forward, 108 pp, December 2010

Accelerating the Pace of Change in Energy Technologies through an Integrated Federal Energy Policy, 58 pp, November 2010

Prepare and Inspire: K-12 Science, Technology, Engineering, and Math (STEM) Education for America's Future, 142 pp, September 2010

Reengineering the Influenza Vaccine Production Enterprise to Meet the Challenges of Pandemic Influenza, 87 pp, August 2010

Third Assessment of the National Nanotechnology Initiative, 96 pp, March 2010

U.S. Preparations for 2009-H1N1 Influenza, 88 pp, August 2009

Other publications (full listing available separately)

Some 380 other professional and popular publications on plasma physics, energy technology and policy, population-resource-environment interactions, global environmental change, and international security and arms control, including:

- 29 chapters in books edited by others;
- 53 articles in refereed journals (e.g., *Plasma Physics*, *Fusion Technology*, *Nuclear Technology*, *Energy*, *Annual Review of Energy and the Environment*, *Bulletin of Atomic Scientists*, *Environment*, *Energy Policy*, *Science*);
- 35 magazine articles (in, e.g., *Saturday Review*, *Scientific American*, *Technology Review*, *Issues in Science and Technology*);
- 51 research reports;
- 88 contributions in conference proceedings;
- 100 reviews, op-eds, blogs, communiques, letters to the editor, introductions, and commentaries; and
- 40 pieces of Congressional testimony and reports to Congress

Selected Honors

Academies

Fellow, American Academy of Political and Social Sciences (elected 2018)

Member, American Philosophical Society (elected 2015)

Foreign Member, Indian National Academy of Engineering (elected, 2015)

Foreign Member, Royal Society of London (elected 2009)

Member, National Academy of Engineering (elected 2000)

Member, National Academy of Sciences (elected 1991)

Fellow, California Academy of Sciences (elected 1985)

Fellow, American Academy of Arts and Sciences (elected 1983)

Other Professional Societies

Member, Council on Foreign Relations (elected 1996)

Fellow, American Physical Society (elected 1988)

Fellow, American Association for the Advancement of Science (elected 1987)

Honorary Degrees

Honorary Sc.D., Rensselaer Polytechnic Institute, 2019
Honorary Sc.D., Green Mountain College, 2016
Honorary Sc.D., University of the District of Columbia, 2012
Honorary Doctor of Laws, University of Rome Tor Vergata, 2010
Honorary Sc.D., Clark University, 2002
Honorary D.Eng., Colorado School of Mines, 1997
Honorary Sc.D., University of Puget Sound, 1975

Monetary Prizes

Daniel Patrick Moynihan Prize of the American Academy of Political and Social Science, 2018
John Heinz Prize in Public Policy, 2001
Tyler Prize for Environmental Achievement, 2000
Kaul Foundation Award for Excellence in Science and Environmental Policy, 1999
Volvo International Environment Prize, 1993
MacArthur Foundation Prize Fellowship, 1981-86

Other Awards (selected)

Albert Nelson Marquis Lifetime Achievement Award (Who's Who), 2019
Order of the Rising Sun, Gold and Silver Star, Government of Japan, 2019
NASA Space Grant Foundation Award for Public Service, 2018
The Order of Diplomatic Merit Gwangha Medal, Government of Korea, 2017
Optical Society of America Advocate of Optics Award, 2016
Paul G. Rogers Public Service Award, Friends of the National Library of Medicine, 2015
Black Rock Forest Consortium William T. Golden Award for Leadership in Science and Science Education, 2014
American Chemical Society Award for Public Service, 2013
Council of Science Society Presidents Award for Outstanding Leadership in Support of Science, 2010
Center for Disease Control and Prevention Charles C. Shephard Science Award, 2010
William Johnson Walker Prize of the Boston Museum of Science (monetary award declined), 2010
Federation of American Scientists Hans Bethe Award, 2010
Robert Fletcher Award of the Thayer School of Engineering, Dartmouth College, 2007
National Associate Award for Exceptional Service, U.S. National Academies, 2001
Fusion Leadership Award for 1998, Fusion Power Associates, Washington DC,
Founders Award, Energy & Resources Group, University of California Berkeley, 1996
Nobel Peace Prize acceptance lecture for the Pugwash Conferences on Science & World Affairs, 1995
Forum Award of the American Physical Society, 1995
Federation of American Scientists Public Service Award for 1979
Distinguished Teaching Award, University of California, Berkeley, 1975

Named Lectures (selected)

Darsh T. Wasan Lecture, Illinois Institute of Technology, 2017
Stephen H. Schneider Memorial Lecture, Stanford University, 2017
Herbert York Memorial Lecture, University of California, San Diego, 2016
Wigner Distinguished Lecture, Oak Ridge National Laboratory 2014
Jerome Wiesner Memorial Lecture, University of Michigan, 2012
Wolfgang Panofsky Memorial Lecture, Academia Nazionale dei Lincei, Rome, 2011
Alan Bromley Memorial Lecture, George Washington University, 2011
Kistiakowsky Lecturer for the American Academy of Arts and Sciences, 1983

Committees and Boards

UN Foundation / Sigma Xi Scientific Expert Group on Climate Change and Sustainable Development
(reporting to the UN Secretary-General, Coordinating Lead Author, 2004-2007)

National Commission on Energy Policy (an independent, bi-partisan, multi-sectoral group providing advice to the Congress and the Administration, Co-Chair, 2002-2009)

President's Committee of Advisors on Science and Technology, Executive Office of the President of the United States (Member 1994-2001)

- Chair, Panel on Nuclear Materials Protection, Control, and Accounting, 1994-95
- Chair, Panel on Research on Magnetic Fusion Energy, 1995;
- Chair, Panel on U.S. Federal Energy R&D for the Challenges of the 21st Century, 1997;
- Chair, Panel on International Cooperation in Energy RDD&D, 1998-99

US-Russian Scientific Commission on the Disposition of Surplus Plutonium (reporting to the Presidents of the United States and Russia, US Chair, 1996-98)

National Academy of Sciences / National Academy of Engineering

- National Academies Science and Technology National Intelligence Panel* (Member, 2017--)
- National Academies Roundtable on Scientific Communication and National Security* (Member, 2003-2006)
- Joint Working Group of the US National Academies and the Russian Academy of Sciences on US-Russian Cooperation on Nuclear Non-Proliferation (US Chair, 2002-2005)
- Committee on Technical Issues Related to Ratification of the Comprehensive Test-Ban Treaty (Chair, 2000-2002)
- Committee on US-India Cooperation on Energy (Chair 1999-2004)
- Committee on Balancing Scientific Openness and National Security Controls at the National Weapons Laboratories (member 1998-1999)
- Committee on US-China Cooperation on Energy (ex officio member, 1998-2000)
- Advisory Board, ISSUES IN SCIENCE AND TECHNOLOGY (1996-2008)
- Committee on International Security and Arms Control (1992-2005; Chair 1993-2005); Chair of the Panel on Reactor-Related Options for Disposition of Weapon Plutonium, 1992-95; US Co-Chair of Working Group of US-China Cooperation on Energy and Security, 1995-97; Chair of the Panel to Review the Spent-Fuel Standard for Disposition of Excess Weapons Plutonium, 1999-2002)
- Panel on Human Impacts on Ecosystems (Chair), Board on Biology and Commission on Behavioral and Social Sciences and Education (1991)
- Committee on Nuclear & Alternative Energy Systems (1975-9)
- Committee to Survey the Literature of Nuclear Risks (1975-9)
- International Environmental Programs Committee (1970-5)
- Panel on Environment & Growth, Committee on Research Applied to National Needs (1973).

American Association for the Advancement of Science

- Advisory Committee on International Science, 2004-6
- Board of Directors of the AAAS, 2005-8
- President-Elect of the AAAS, 2005-6
- President of the AAAS, 2006-7
- Chairman of the Board of the AAAS, 2007-8

American Academy of Arts and Sciences

- Committee on International Security Studies (1982-99, Vice Chair 1983-99).
- U.S. Pugwash Committee (Chair 1983-91, Co-Chair 1992-95)

U.S. Department of Energy Committees

- Fusion Energy Advisory Committee (1991-4)
- U.S. National Review Committee for the International Thermonuclear Engineering Reactor Conceptual Design Activity (1991)
- Senior Committee on Environmental, Safety, and Economic Aspects of Magnetic Fusion Energy (Chair 1985-89)
- Energy Research Advisory Board (1978-9)

Pugwash Conferences on Science and World Affairs

- Member of the International Council (1982-97)
- Member of the Executive Committee of the Council (1982-97, Chair 1987-97)

MacArthur Foundation

Member of the Board of Directors (1991-2005; Chair of the Board Committee for the Program on Peace and International Cooperation, 1994-96; Budget Committee, 2000-2005; Chair of the Committee on Institutional Policy, 2002-2005)
Advisory Panel to the International Security Program (1984-8)

Federation of American Scientists (Council Member, 1974-78, 1979-86; Treasurer, 1979-80; Vice Chairman, 1980-84; Chairman, 1984-86)

Editorial Boards: Innovations: Technology, Governance, Globalization (2005-9), Issues in Science and Technology (2000-9), International Journal of Global Energy Issues (1989-95); Science and Global Security (1987-95); Environmental Conservation (1984-2000); Bulletin of the Atomic Scientists (1984-86, Advisory Council 1979-81); Soft Energy Notes (1979-82); Resources and Energy (1978-90); Annual Review of Energy (1975-82).

Other: Executive Committee, Fusion Division, American Nuclear Society (1987-1991); Advisory Council, Aldo Leopold Leadership Program (1995-2001); Jury for the 2000 Blasker Energy Prize; US-China Advisory Council for Sustainable Development (2000-8), International Climate Change Task Force (2004-5), Board of Directors, US Civilian Research and Development Foundation (2001-8), Board of Councilors, China-US Center for Sustainable Development (2002-8), Board of Directors, Climate Central (2008).

Teaching

Harvard (FAS = Faculty of Arts and Sciences, KSG = Kennedy School of Government)

Junior Seminar in Environmental Science and Public Policy (FAS 1997,99,01,03); Energy Systems (KSG 1996,97,98,99,00,01,03,05,06,07,08); Interdisciplinary Science and Technology Assessments for Policy (KSG 1997,98,99,00,01,02,04,05); Introduction to Environmental and Resource Science for Policy (KSG 00,01,03,04,05,06,08); Introduction to Science and Technology Policy (KSG 97,01,03,04,05,06); The Energy-Climate Challenge (KSG 2017,18,19); Policy Innovation for the Rapidly Changing Arctic (KSG 2018); Science and Technology in Domestic and International Policy (KSG 17,19).

UC Berkeley

Energy and Society (1973-95); Critical Issues in Energy Technology (1973-1978); Quantitative Aspects of Global Environmental Problems (1973-1996); Professional Methods for Interdisciplinary Careers (1980-1994); graduate seminars on diverse topics (1976-1996).

Personal

Born 1 March 1944, Sewickley, Pennsylvania; married Cheryl Lea Edgar (now Dr. Cheryl E. Holdren) February 1966; children John Craig (b. 1966) and Jill Virginia (b. 1968); grandchildren Alexis Ukiah Han Holdren (b. 1991), Maya Michelle Banks Holdren (b. 1992), Laurel Makaira Holdren (b. 2000), Tor Ilan Holdren Holck (b. 2001), Kalea Tazlena Holck Holdren (b. 2005).